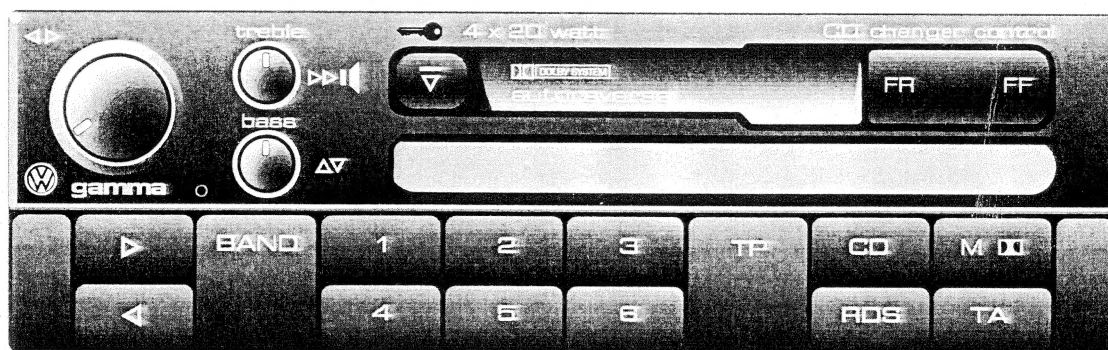


Service  
Service  
**Service**

For repair instructions of the cassette deck see Service Manual SCA 4.4 (4822 725 23509)

# Service Manual

12 V 



## CONTENTS

Page 2	Technical datas
Page 3	Controls
Page 4	Security code, Connectorblock
Page 5	Wire diagram
Page 6	Testmode
Page 7	Checks
Page 8	Adjustments
Page 9	Pin allocations
Page 10	Front PWB's
Page 11	Circuit 1: LCD, Switches, Illumination, Potentiometer, $\mu$ C Supply
Page 12	Main PWB
Page 13	Circuit 2: FM Modul, AM Part, PLL Synthesizer
Page 14	Circuit 3: Stereo decoder
Page 15	Circuit 4: Preamplifier / Dolby / MSS
Page 16	Circuit 5: $\mu$ C, RDS / Noise / Multipath
Page 17	Circuit 6: Audio control, AF Power stage
Page 18	Circuit 7: Power supply
Page 19	Circuit 8: Connectorblock, Bus module, Gala, Subwoofer control
Page 20	Exploded view
Page 21	Mechanical partslist
Page 22-26	Electrical partslist

## Technical Datas

### General

Power supply:	14,4 V
Currents:	2 mA (set switched off)
	ca. 2,9 A (4x5 W Cassette mode)
	ca. 2,8 A (4x5 W Radio mode)

### Radio

FM frequency range	87,5 - 108 MHz
AM frequency range	153 - 1602 KHz
FM search grid	50 KHz (100 KHz displayed) (100 KHz RDS mode)
AM search grid	9 KHz
Presets	6 FM 6 TP 6 AS 6 AM
FM search tuning	2 levels (LO/DX)
IF	10,7 MHz

### Cassette

Number of tracks	2
Tape speed	4,76 cm/sec
Wow + flutter	0,35 %
Crosstalk	28 dB

### Amplifier

Output	4 x 18 W at 4 $\Omega$ load
Channel separation max.	34 dB (1 KHz)

## CONTROLS

### 1. On/Off, Volume, Search

- turn: on/off + volume.
- push: start search tuning on LOC level, scan all stations and play them for 5 sec.  
Automatic switching to DX level after run through of LOC level.
- push-push: start search tuning on DX level, scan all stations and play them for 5 sec.
- push: - while scan- search tuning: stop at the last received station.
- hold: manual search tuning, after releasing the button the next receivable station will be reproduced.
- push: - while ignition off and volume knob in on position: switch on set for 1 hour
- push: - while cassette mode: reverse direction

### 2. Treble

- push: sink and release the button
- turn: adjust treble
- pull-turn: adjust GALA volume

### 3. Bass

- push: sink and release the button
- turn: adjust bass
- pull-turn: adjust fader

### 4. Eject

- push: start/stop cassette playback
- hold 1 sec: cassette eject

### 5. FF (FR)

- push: - while cassette mode: wind/stop wind fast forward (backward)
- hold: - while CDC mode: playback fast forward (backward), cue (review)

### 6. Tune next (Tune previous)

- push: start search tuning up (down) to next receivable station.  
Automatic switch to DX level if no LOC level station can be found
- push-push: start search tuning in DX level up (down) to next receivable station
- hold: start manual search tuning up (down) after 1 sec until button is released
- push: - while RDS mode: scroll stations of learn memory (AS/TP/FM)
- push: - while cassette mode: start MSS forward (backward)
- push: - while CDC mode: next (previous) track of current CD

### 7. Band

- push: scroll wavebands - FM - AS - AM - FM ...
- hold 2 sec: search best FM-stations for learn memory (AS/TP/FM)

### 8. Presets

- push: select stored stations of the preselected band
- hold 2 sec: store actual station
- push: - while CDC mode: select concerned CD

### 9. TP

- push: select band where only RDS stations with TP- and EON-TP-information can be received and stored under presets.
- while TP band and no TP station selected: Switch to TP station if traffic announcement comes.
- while AM, FM or AS band and no TP station selected: start TP search

### 10. CD

- push: switch between radio- (or cassette-) and CDC mode

### 11. RDS

- push: RDS on/off (default on). AF, PI, PS, TP, TA, EON, PTY, MS (music/speech) features on/off.

### 12. S. Dolby

- push: Stereo on/off
- push: - while cassette mode: DOLBY (NR) ON/OFF
- push: - while CDC mode: Shuffle play of actual CD

### 13. TA

- push: mute and start TP search if necessary, switch from AM to FM-TP,  
only traffic announcements audible in mono with TA-loudness.
- push: - while cassette or CDC mode: interrupt reproduction of cassette or CD during TA
- hold 1 sec: store actual volume as TA volume

## SECURITY CODE HANDLING

Action	Displayed character
<b>Activation</b>	
Press 'TA' and 'TP' >3 sec.	CODE (for 3 sec.), -> 1000
Push presets '1...4'	digits of code number changes
Press 'TA' and 'TP' >3 sec.	SAFE
DEACTIVATION OF THEFT PROTECTION IS NOT POSSIBLE !!!	

### Code entering after power interruption

	SAFE
Press 'TA' and 'TP' >3 sec.	1000
Push presets '1...4'	digits of code number changes
Press 'TA' and 'TP' >3 sec.	SAFE

### Wrong code

Enter wrong code number	SAFE 1 (flashing for first 3 sec.)
Press 'TA' and 'TP' >3 sec.	1000 1
Enter code.	
Enter wrong code number twice	SAFE 2 (flashing for first 3 sec.)
Wait 1 hour (do not switch off !)	SAFE
Enter code.	

### Unknown code (lost code-card)

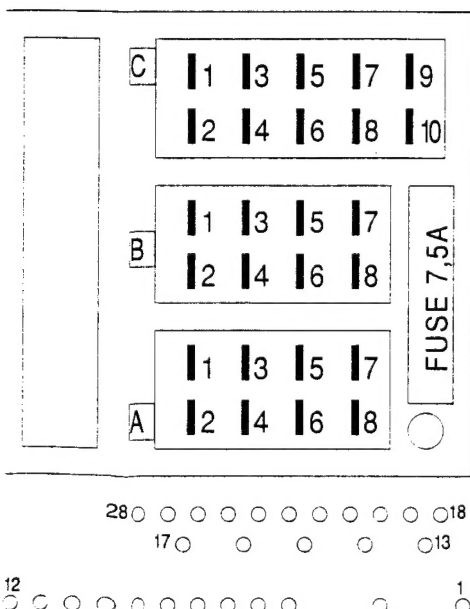
Contact your local VW-organisation to get the right code for your set.

### ! NOTE

If you have any problems with activation of security code or others which belongs to the code, send the set to:

Philips Apparatefabrik Wetzlar  
Department SP-CS  
Philipsstrasse 1  
D - 6330 Wetzlar  
GERMANY

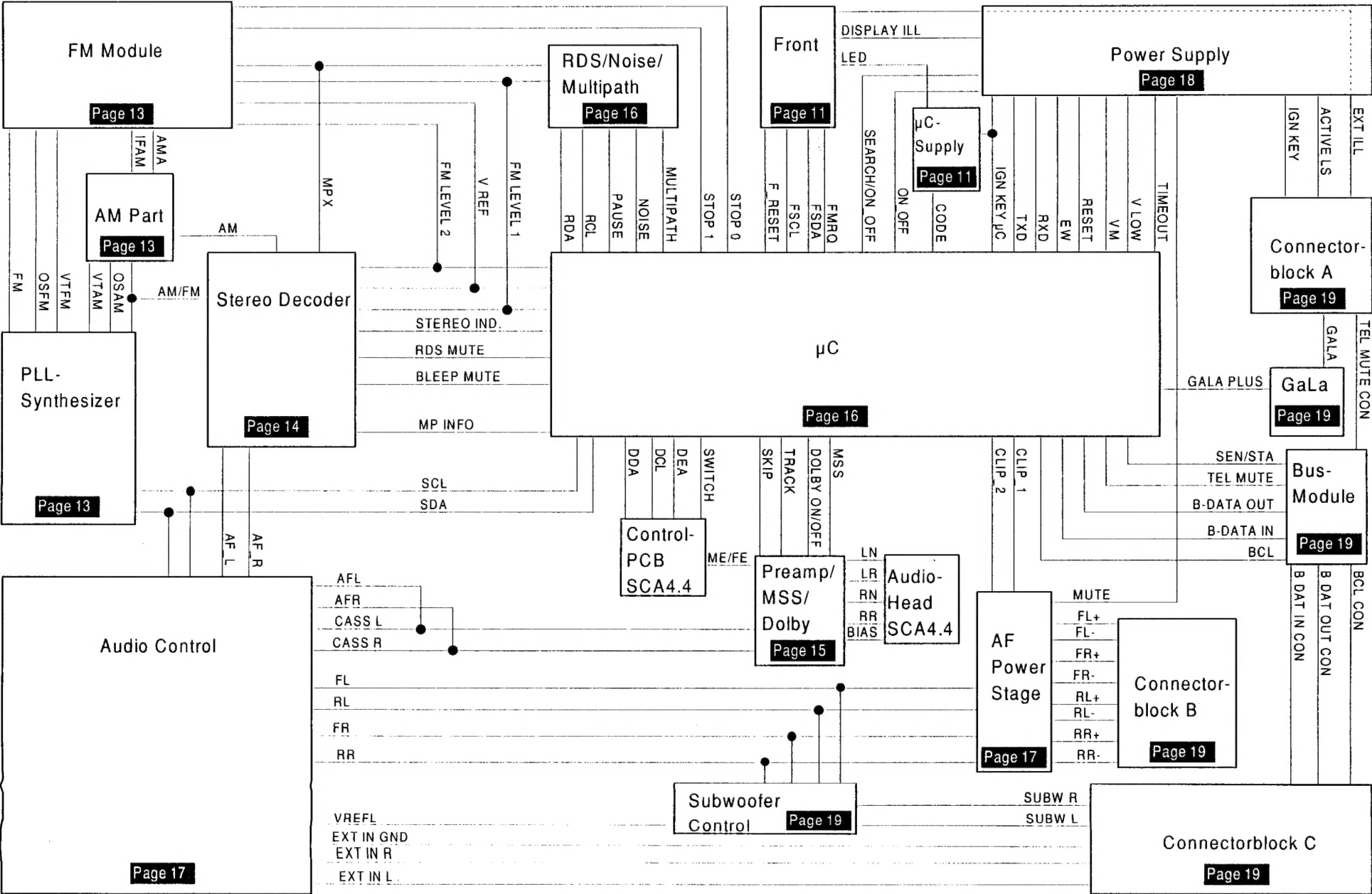
## CONNECTORBLOCK 22DC588



C1: DATA IN	> 27	C6: SWITCHED + (CDC)	> 5
C2: CLOCK	> 26	C7: EXT.IN R	> 10
C3: EXT.IN GND	> 25	C8: SUBW.R	> 9
C4: DATA OUT	> 17	C9: SUBW.L	> 8
C5: GND	> 6	C10: EXT.IN L	> 7
B1: RR+	> 19	B5: FL+	> 22
B2: RR-	> 24	B6: FL-	> 21
B3: FR+	> 23	B7: RL+	> 20
B4: FR-	> 14	B8: RL-	> 13
A1: GALA	> 16	A5: SWITCHED + (AERIAL)	> 4
A2: TEL.MUTE	> 15	A6: EXT.ILL.	> 2
A3: SWITCHED + (LS)	> 28	A7: PERM.+	> 1
A4: IGN.KEY	> 3	A8: GND	> 18



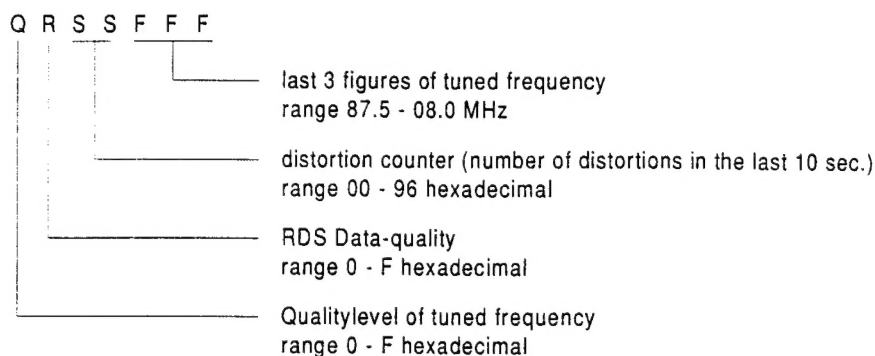
WIRING DIAGRAM 22DC588



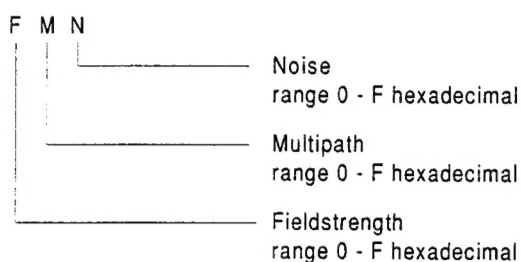
# TESTMODE

Press the FF - button more than 5 seconds to activate the testmode. The display shows two lines:

## Main-Line



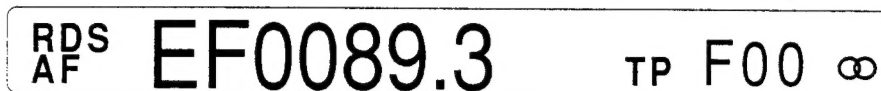
## Sub-Line



Main-Line

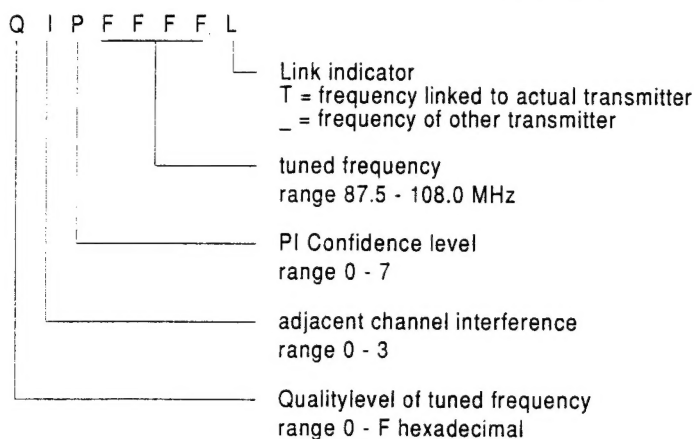
Sub-Line

## Example

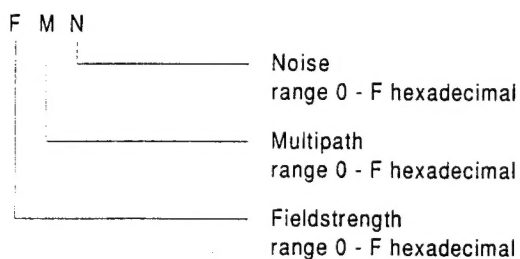


Push FF - button again (short) to see information about stored AF's of actual station:

## Main-Line (stored values)



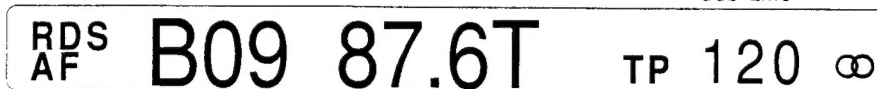
## Sub-Line (actual values)



Main-Line

Sub-Line

## Example









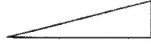



Push FF- button again to switch back to testmode 1.

Switch set off or press FF - button more than 5 seconds to leave the testmode.

# Checks 22DC588

Check	Band					
Varicap-voltage	AM FM			153 KHz 1602 KHz 87,5 MHz 108 MHz	IC 7251 PIN 15 FM 1008 PIN 15	> 1,5 V < 6,0 V > 1,0 V < 6,0 V
Demodulated AM - level	AM	1053 KHz, 1 mV 1 KHz, 30% AM			IC 7201 PIN 12	350 +/- 100 mV
Demodulated FM - level	FM	93,0 MHz, 1 mV $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz 93,0 MHz, 1 mV $\Delta f = 6,75$ KHz $f_{mod} = 19$ KHz 93,0 MHz, 1 mV $\Delta f = 3,75$ KHz $f_{mod} = 57$ KHz			FM 1008 PIN 2	160 mV  45 mV  20 mV
FM mute S/N	FM	93,0 MHz, 1 mV $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz 93,0 MHz, 1 mV $\Delta f = 22,5$ KHz without modulation			Connectorblock Section B PIN 3 + PIN 5	600 - 800 mV => Referencelevel (dB)  Referencelevel - 24 dB
Tel. mute	FM	93,0 MHz, 1 mV $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz			Connectorblock Section B PIN 3 + PIN 5	600 - 800 mV => Referencelevel (dB)
		Connectorblock Section A: connect PIN 2 to GND				Referencelevel - 40 dB
Wide band AGC switch	AM	1053 KHz, 10 mV without modulation 1053 KHz, 2,0 V without modulation			IC 7201 PIN 1	V1 ~ 6,5 V  V2 ~ 7,0 V (V2 - V1 > 0,5 V)
FM - search - sensitivity	FM FM	94,1 MHz, 8 $\mu$ V $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz 94,1 MHz, 80 $\mu$ V $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz		DX - Search tuning  LO - Search tuning		t start/sto ~ 20 sec.
AM - search - sensitivity	AM AM	1053 KHz, 20 $\mu$ V without modulation 1053 KHz, 200 $\mu$ V without modulation		DX - Search tuning  LO - Search tuning		t start/sto ~ 15 sec.

## Adjustments 22DC588

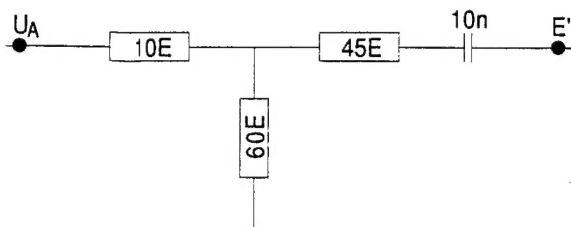
Adjustment	Band					
$\infty$ - 3 dB	FM  FM	94,1 MHz, 1 mV $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz 94,1 MHz, 5 $\mu$ V $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz		  R 3105	Connectorblock Section B PIN 3 + PIN 5 Connectorblock Section B PIN 3 + PIN 5	600 - 800 mV => Referencelevel (dB)  Referencelevel - 3 dB
SDS Channel - separation	FM	94,1 MHz, 63 $\mu$ V $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz (right channel only) Stereo-Pilot 10%		R 3630	Connectorblock Section B PIN 3 <-> PIN 5	5 dB (+/- 1 dB)
Channel - separation maximum	FM	94,1 MHz, 4 mV $\Delta f = 22,5$ KHz $f_{mod} = 1$ KHz (right channel only) Stereo-Pilot 10%		R 3608	Connectorblock Section B PIN 3 <-> PIN 5	> 34 dB
Noise - detector	FM	94,1 MHz, 1 mV $\Delta f = 75$ KHz $f_{mod} = 40$ KHz		R 3426	Testmode (push FF more than 5 sec.)	third figure of subline=3
Dolby level	CC	SBC 419 200 nWb / m 400 Hz	normal + reverse	R 3514 (right) R 3504 (left)	IC 7535 PIN 3 (right) PIN 14 (left)	450 mV

Do not adjust coils 5210 and 5228 (AM-PART), because they are correctly preadjusted by supplier !

For all checks and alignments use VW Dummy-aerials:

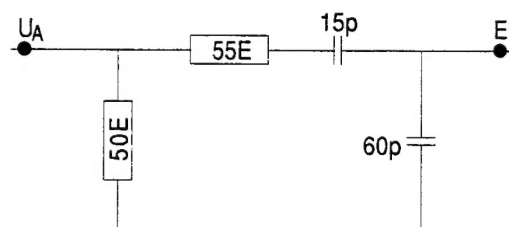
FM - Ri: 75 Ohm / 6 dB

$$E' (\mu V) = U_A (\mu V)$$



AM - Ri: 50 Ohm / 20 dB

$$E' (\mu V) = 0,2 \times U_A (\mu V)$$

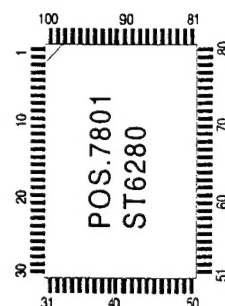
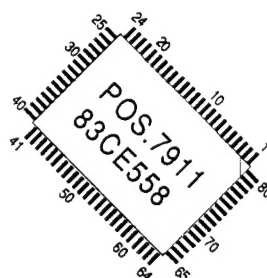
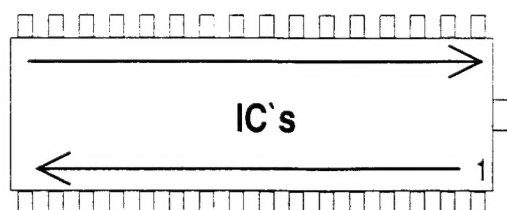


### **! NOTE**

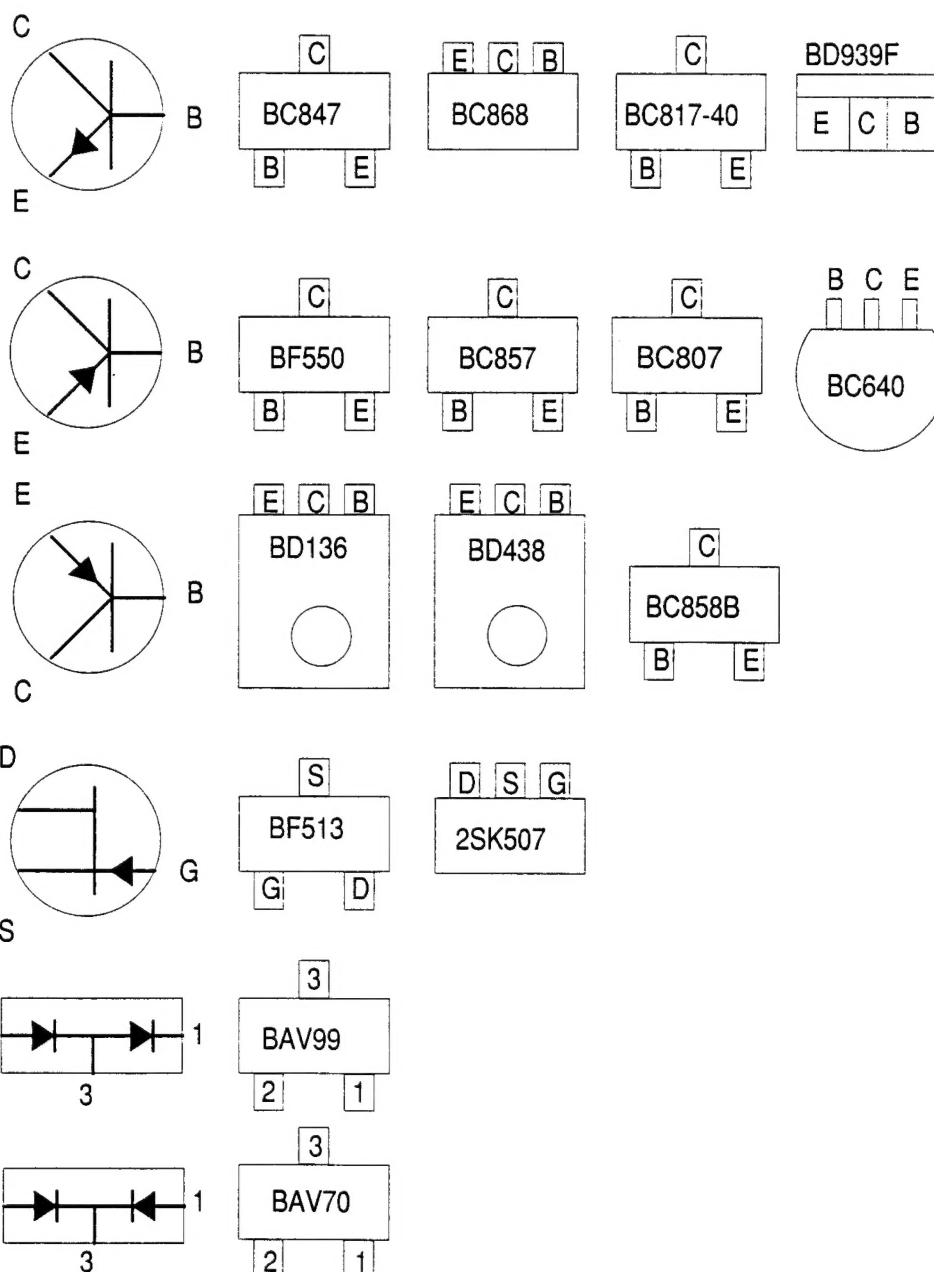
FM- and AM- search sensitivities are only adjustable with a special equipment via software.  
If you get sets with search sensitivities out of specification, send them to factory-service in Wetzlar until further notice.

Philips Apparatefabrik Wetzlar  
Department SP-CS  
Philipsstrasse 1  
D - 35576 Wetzlar  
GERMANY

# **PIN - ALLOCATIONS** **Views from chip side (bottom)**



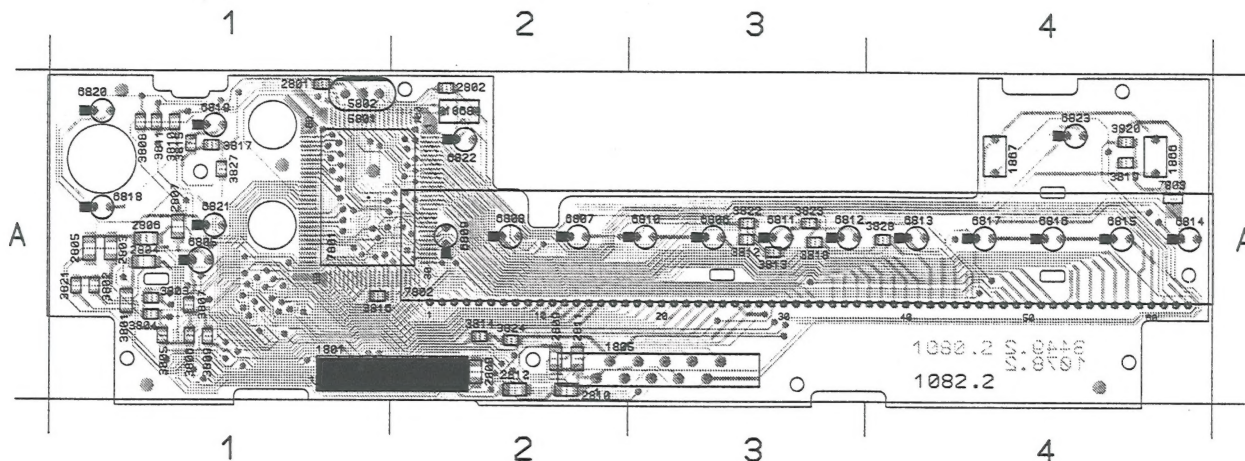
POS.1008 FM-MODUL





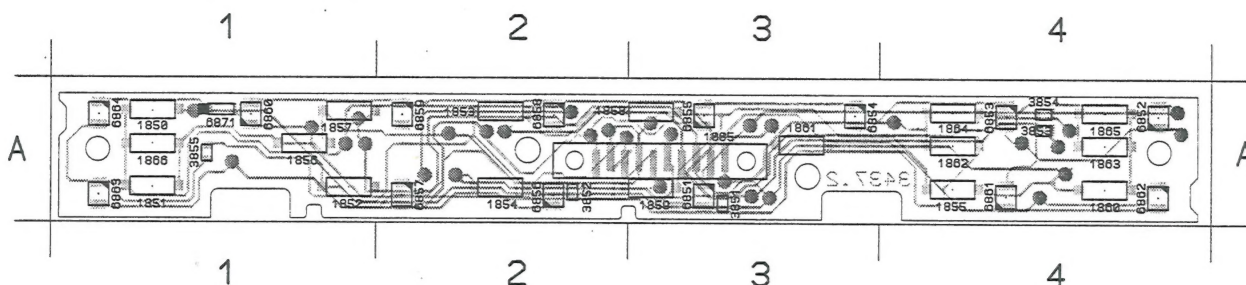
# FRONT PWB'S

1801 A 1 2801 A 1 2805 A 1 2811 A 2 3804 A 1 3809 A 1 3814 A 2 3819 A 4 3824 A 2 5805 A 1 5810 A 3 5815 A 4 5820 A 1 7802 A 2  
 1805 A 2 2802 A 2 2807 A 1 2812 A 2 3805 A 1 3810 A 1 3815 A 1 3820 A 4 3827 A 1 5806 A 3 5811 A 3 5816 A 4 5821 A 1 7803 A 4  
 1850 A 4 2803 A 1 2808 A 2 3801 A 1 3806 A 1 3811 A 1 3816 A 1 3821 A 1 3826 A 4 5807 A 2 5812 A 3 5817 A 4 5822 A 2  
 1807 A 4 2804 A 1 2809 A 2 3802 A 1 3807 A 1 3812 A 3 3817 A 1 3822 A 3 5801 A 1 5806 A 2 5813 A 4 5818 A 1 5823 A 4  
 1858 A 2 2805 A 1 2810 A 2 3803 A 1 3808 A 1 3813 A 3 3818 A 3 3823 A 3 5802 A 1 5807 A 2 5814 A 4 5819 A 1 7801 A 1



## LCD PWB

1885 A 2 1852 A 1 1855 A 4 1858 A 3 1801 A 3 1804 A 4 3851 A 3 3854 A 4 5852 A 4 5855 A 3 5858 A 2 5801 A 4 5804 A 1  
 1850 A 1 1853 A 2 1850 A 1 1859 A 3 1802 A 4 1805 A 4 3852 A 2 3855 A 1 5853 A 4 5856 A 2 5859 A 2 5802 A 4 5871 A 1  
 1851 A 1 1854 A 2 1857 A 1 1800 A 4 1803 A 4 1806 A 1 3853 A 4 3851 A 3 5854 A 3 5857 A 2 5800 A 1 5803 A 1



## SWITCH PWB

### Pos.7801 ST62E80

1 - 17: 3,8 V (LCD-DATA)  
 18: NC  
 19: GND  
 20: 0,0...5,0 V (VOLDEP.)  
 21: 0,0...5,0 V (BASSDEP.)  
 22: 0,0...5,0 V (TREBDEP.)  
 23: 0,0...5,0 V (GALADEP.)  
 24: 0,0...5,0 V (FADDEP.)  
 25, 26: 0,0 V (KEYMATRIX)  
 27: GND  
 28: 2,3 V (OSZ)  
 29: 1,8 V (OSZ)  
 30: 5,0 V (F-RESET)  
 31 - 33: 0,0 V (KEYMATRIX)  
 34 - 36: 5,0 V (KEYMATRIX)  
 37, 38: 5,0 V  
 39: GND  
 40: 5,0 V  
 41: GND  
 42: 10,0 V (8,5 V SHARPDISPL.)  
 43: 6,0 V  
 44: 4,5 V  
 45: 3,0 V  
 46: 1,5 V  
 47, 48: 5,0 V (SDA)  
 49: 5,0 V (SCL)  
 50: 5,0 V (MRQ)  
 51 - 54: NC  
 55 - 100: 3,8 V (LCD-DATA)

### Pos. 7803 BC847

B: 0,6 V / 0,8 V (EXT.ILL.)  
 C: 0,0 V / 0,6 V (EXT.ILL.)  
 E: GND

### Pos.7913 BC847

B: 0,0 V / 5,0 V (IGN.OFF)  
 C: 5,0 V  
 E: 0,0 V / 4,3 V (IGN.OFF)

### Pos.7914 BC847

B: 0,6 V / 0,0 V (IGN. OFF)  
 C: 0,0 V / 5,0 V (IGN. OFF)  
 E: GND

### Pos. 7924 BC847

B: 5,0 V  
 C: 5,0 V  
 E: GND

### Pos.7925 BC847

B: 0,0 V / BLINKLED (IGN.OFF)  
 C: 0,0 V / BLINKLED (IGN.OFF)  
 E: GND

### Pos.7926 BC847

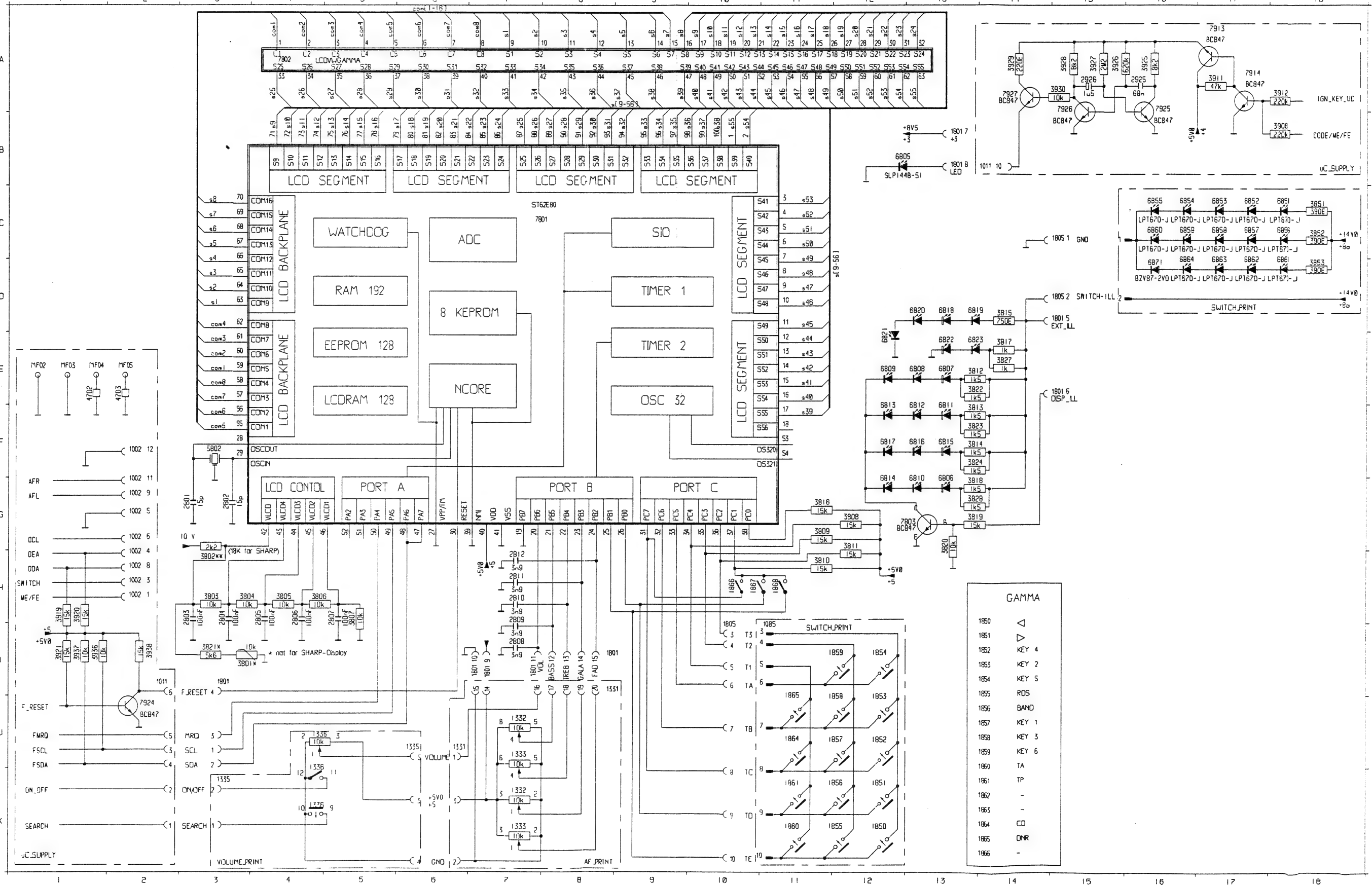
B: 0,0 V / BLINKLED (IGN.OFF)  
 C: 0,0 V / BLINKLED (IGN.OFF)  
 E: GND

### Pos.7927 BC847

B: 0,0 V / BLINKLED (IGN.OFF)  
 C: 0,0 V / 4,3 V (IGN.OFF)  
 E: 0,0 V / V\_BLINKLED (IGN.OFF)

# LCD / SWITCHES / ILLUMINATION / AF / VOL. / uC SUPPLY

1002	H 2	1011	B14	1801	E14	1852	J12	1861	K11	2804	H 3	2925	A16	3803	G12	3817	E14	3828	G13	3921	I 1	3938	I 2	6810	G13	6819	D13	6855	C16	6864	D16	7926	A15
1002	H 2	1332	K 7	1801	B13	1853	J13	1864	J11	2805	H 4	2926	A15	3803	G11	3818	G13	3851	C16	3925	A16	3938	E 1	6811	F13	6820	D13	6856	C18	6871	D16	7927	A14
1002	H 2	1332	K 7	1801	B13	1854	J13	1865	J11	2806	H 4	2926	A15	3810	H11	3819	G13	3852	C18	3926	A15	3937	E 2	6812	F13	6821	E12	6857	C17	7801	C 7	MF02	E 1
1002	G 2	1333	K 7	1801	I 7	1855	K12	1866	H10	2807	H 5	3802	H 3	3811	G12	3820	G13	3853	D18	3927	A15	3937	F 3	6813	F12	6822	E13	6858	C17	7802	A 4	MF03	E 1
1002	G 2	1333	K 7	1801	I 7	1856	K12	1867	H10	2808	H 5	3803	H 3	3812	E13	3821	I 3	3908	B18	3928	A15	3937	B12	6814	G12	6823	E13	6859	C16	7803	G13	MF04	E 1
1002	H 2	1336	J 4	1805	C14	1857	J12	1868	H11	2809	H 7	3804	H 3	3813	F13	3822	E13	3911	A17	3929	A14	3937	G13	6815	F13	6824	C18	6860	C16	7913	A17	MF05	E 2
1002	G 2	1336	K 4	1805	D14	1858	J12	2801	G 3	2810	H 7	3805	H 4	3814	F13	3823	F13	3912	A18	3930	A15	3937	E13	6816	F13	6825	C17	6861	D18	7914	A17		
1002	G 2	1336	K 4	1850	K12	1859	I12	2802	G 3	2811	H 7	3806	H 4	3815	D14	3824	F13	3919	H 1	3936	I 1	3937	E12	6817	F12	6826	C17	6862	D17	7924	J 2		
1002	F 2	1801	D14	1851	K12	1860	K11	2803	H 3	2812	H 7	3807	H 5	3816	G11	3827	E14	3920	H 1	3937	I 1	3937	E12	6818	D13	6854	C16	6863	D17	7925	A16		

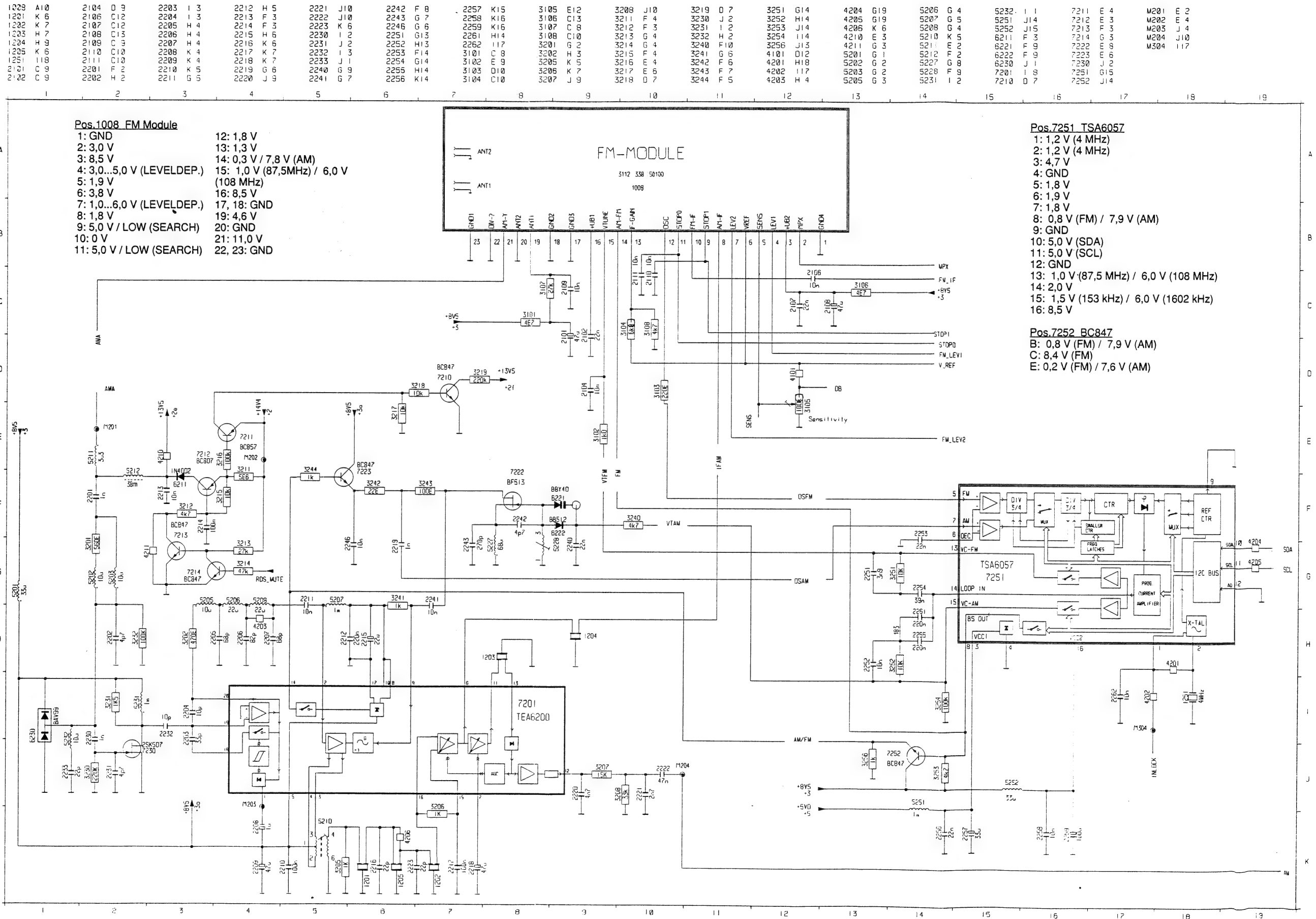




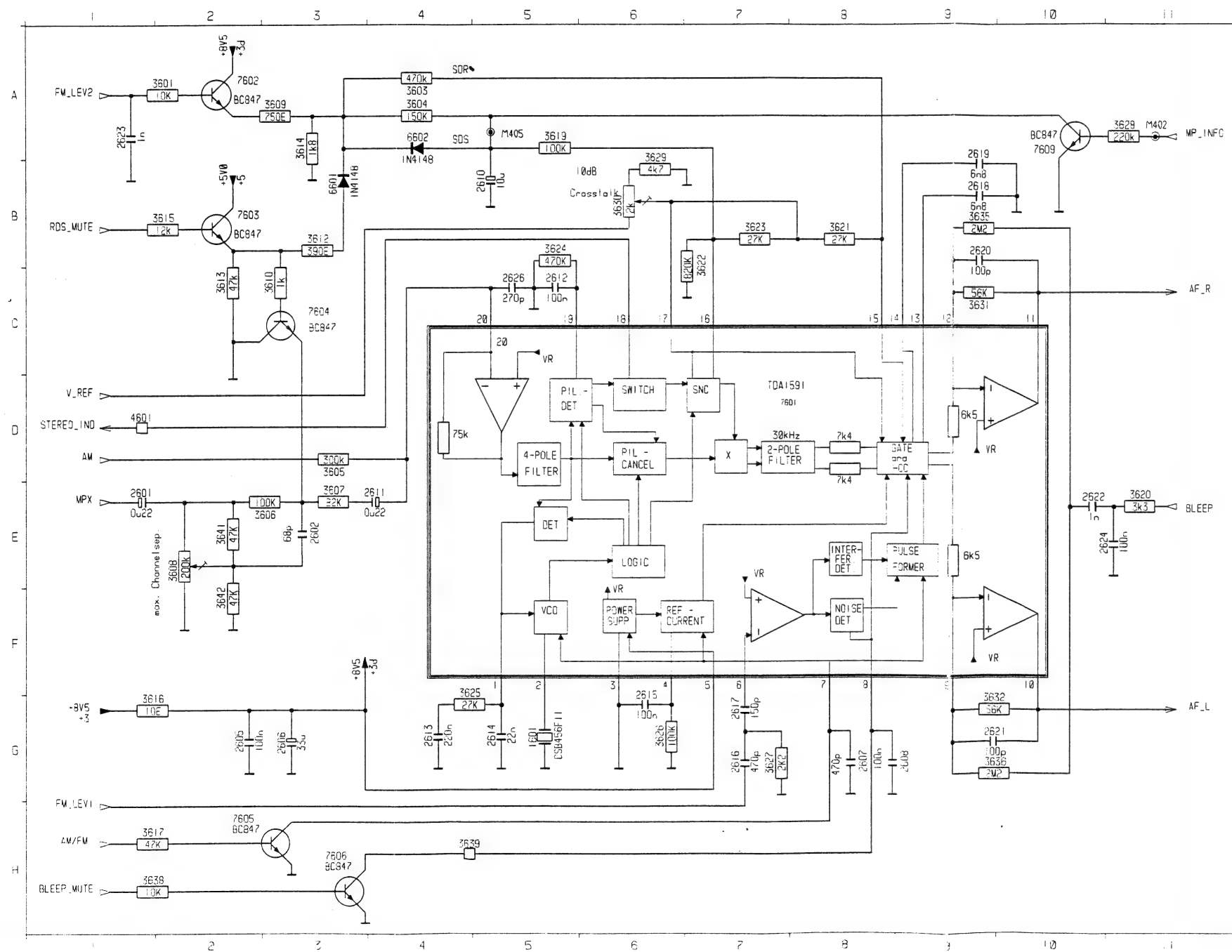




# FM MODUL / AM PART / PLL SYNTHESIZER



# STEREO DECODER



1501	G 5
2601	E 1
2602	E 3
2605	G 2
2606	G 3
2607	G 3
2608	G 3
2610	B 5
2611	E 4
2612	C 5
2613	C 4
2614	G 5
2615	G 6
2616	G 7
2617	G 7
2618	B 3
2619	A 9
2620	B 9
2621	B 9
2622	E 10
2623	A 1
2624	E 1
2626	C 5
3601	A 2
3603	A 4
3604	A 4
3605	D 3
3606	E 3
3607	E 3
3608	E 3
3609	C 5
3610	C 5
3612	B 5
3613	C 2
3614	A 3
3615	B 2
3616	G 1
3617	H 1
3619	A 5
3620	E 1
3621	B 3
3622	B 7
3623	B 7
3624	B 5
3625	B 4
3626	G 6
3627	G 7
3628	A 1
3629	B 6
3630	B 9
3631	C 9
3632	C 9
3633	B 9
3634	H 1
3635	H 4
3636	E 2
3637	E 2
3638	D 1
3639	B 3
6601	A 4
6602	A 4
7601	D 7
7602	A 2
7603	B 3
7604	C 2
7605	H 2

7606	H 3
7609	A 10
M402	A 11
M405	A 5

## Pos.7601 TDA1591

- 1: 4,6 V
- 2: 4,3 V
- 3: GND
- 4: 3,0 V
- 5: 8,5 V
- 6: 2,2 V
- 7: 2,2 V / 0,0 V (AM)
- 8: 6,2 V
- 9 - 14: 3,8 V
- 15 - 17: 3,0 V
- 18: 5,0 V / 0,0 V (MONO)
- 19, 20: 3,0 V

## Pos.7602 BC847

- B: 1,0...6,0 V (LEVELDEP.)
- C: 8,5 V
- E: 0,0...5,0 V (LEVELDEP.)

## Pos.7603 BC847

- B: 0,0 V
- C: 5,0 V
- E: 0,0 V

## Pos.7604 BC847

- B: 0,0 V
- C: GND
- E: 0,0 V

## Pos.7605 BC847

- B: 0,2 V / 0,6 V (AM)
- C: 2,2 V / 0,0 V (AM)
- E: GND

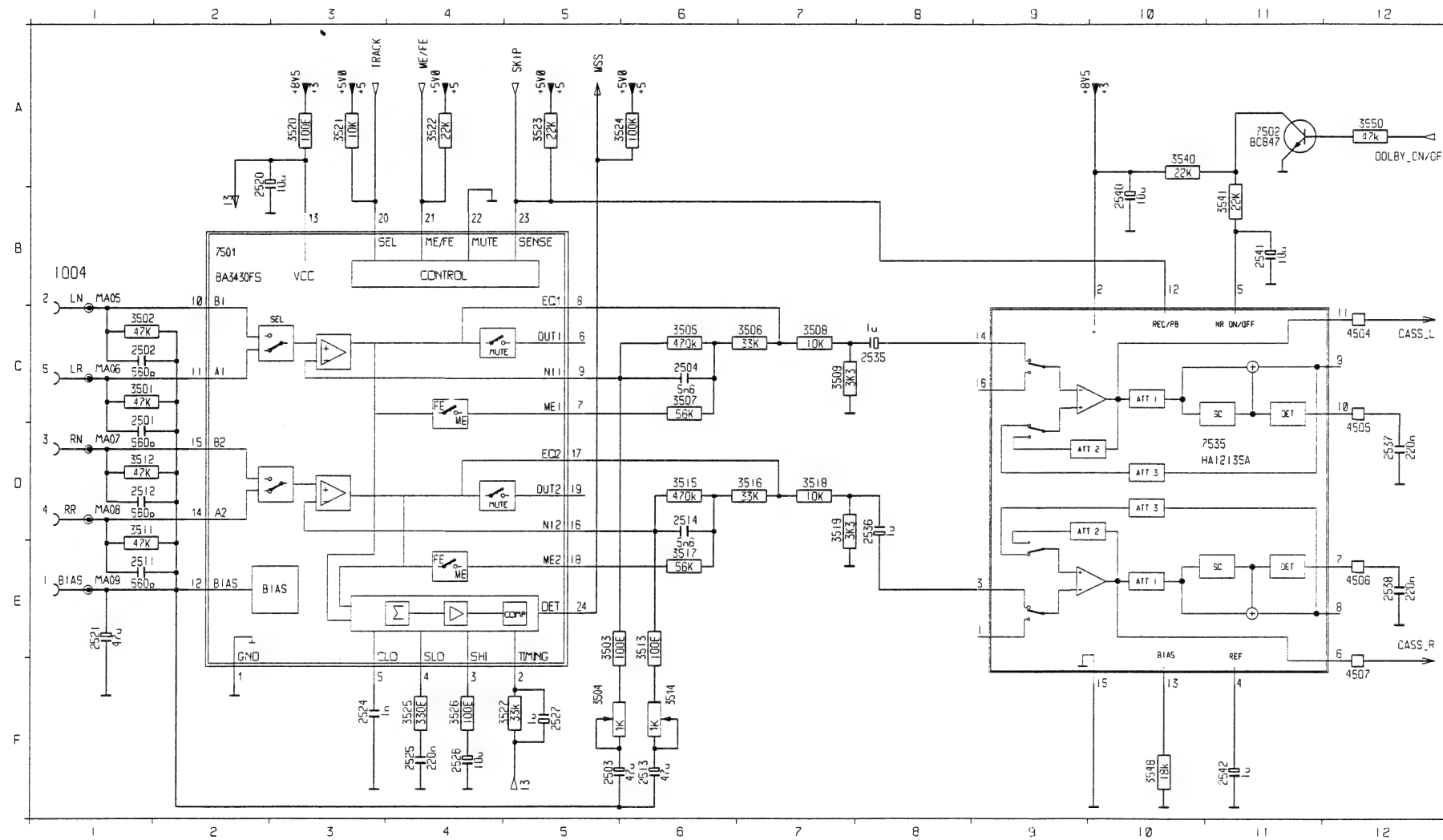
## Pos.7606 BC847

- B: 0,0 V / 0,6 V (MUTE)
- C: 6,2 V / 0,0 V (MUTE)
- E: GND

## Pos.7609 BC847

- B: 0,0 V
- C: 3,2 V
- E: GND

**PREAMPLIFIER / DOLBY / MSS**



1004	B 1	4504	C 12
2501	D 1	4505	D 12
2502	C 1	4506	E 12
2503	F 5	4507	F 12
2504	C 6	7501	B 2
2511	E 1	7502	A 11
2512	D 1	7535	D 10
2513	F 6	MA05	B 1
2514	D 6	MA06	C 1
2520	A 2	MA07	D 1
2521	E 1	MA08	D 1
2524	F 3	MA09	E 1

Pos.7501 BA3430FS

- 1: GND  
2: 7,0 V  
3: 3,0 V  
4, 5: 3,1 V  
6: NC  
7 - 12: 3,1 V  
13: 7,0 V  
14 - 18: 3,1 V  
19: NC  
20: 2,5 V (NOR) / 0,0 V (REV)  
21: 4,3 V (ME) / 0,0 V (FE)  
22: GND  
23: 0,1 V (PLAY) / 3,6 V (WIND, MSS)  
24: 0,0 V / 5,0 V (NO SIGNAL ON TAPE)

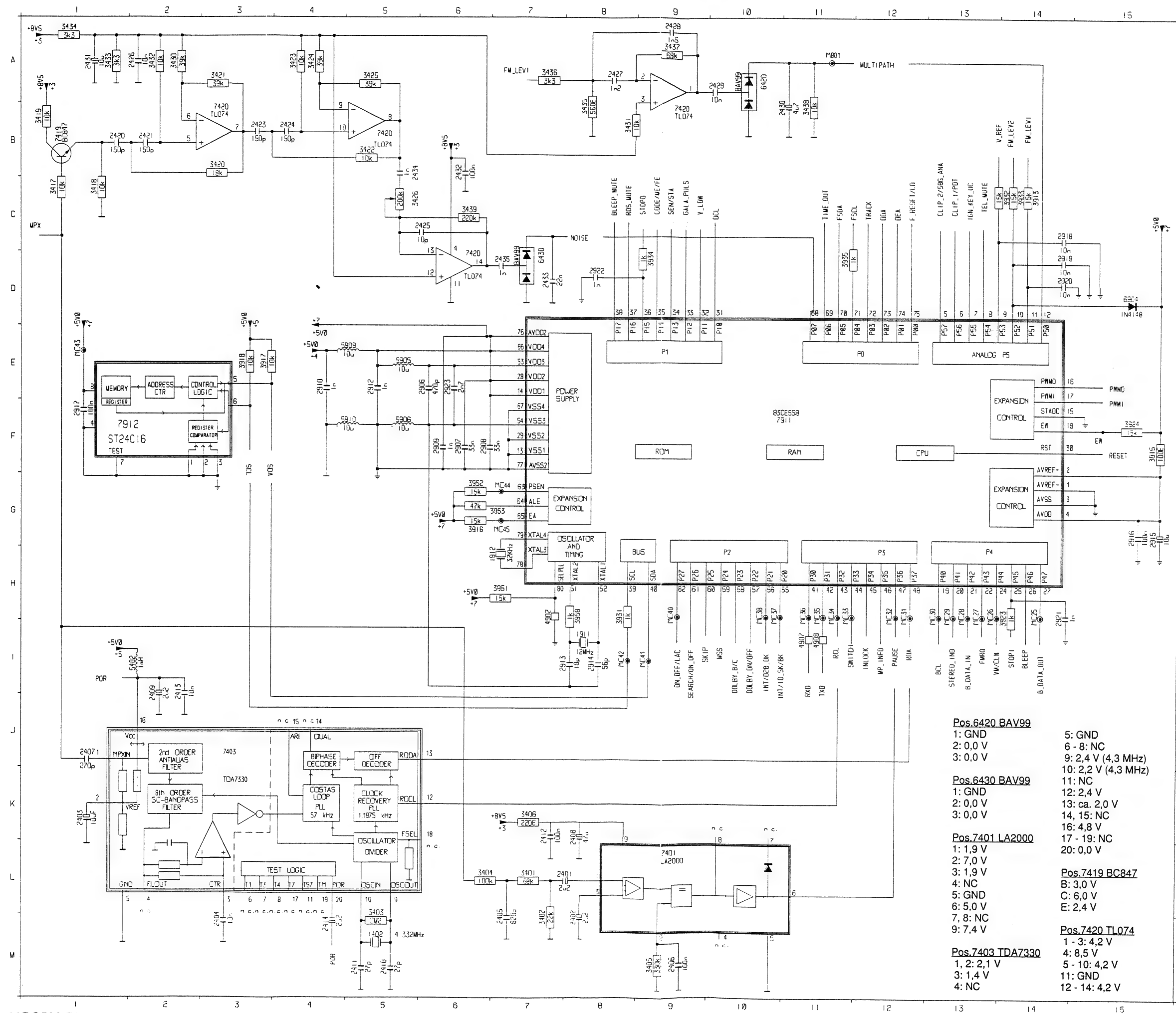
Pos.7502 BC847

- B: 0,6 V / 0,0 V (DOLBY ON)  
C: 0,0 V / 8,4 V (DOLBY ON)  
E: GND

Pos.7535 HA12135A

- 1: NC  
2: 8,5 V  
3, 4: 4,0 V  
5: 0,4 V / 8,3 V (DOLBY ON)  
6: 4,0 V  
7: 1,3 V  
8, 9: NC  
10: 1,3 V  
11: 4,0 V  
12: 0,1 V (PLAY) / 3,6 V (WIND, MSS)  
13: 0,9 V  
14: 4,0 V  
15: GND  
16: NC

## uC / RDS / NOISE / MULTIPATH



	1402	M 5	7403	J 3
	1911	I 8	7419	B 1
	1912	H 7	7420	B 9
A	2401	L 8	7420	B 3
	2402	M 8	7420	B 5
	2403	K 1	7420	D 6
	2404	M 3	7911	F 10
	2405	M 7	7912	F 1
	2406	M 9	M801	A 11
	2407	J 1	MC25	114
	2408	K 8	MC26	113
	2409	I 2	MC27	113
B	2410	M 5	MC28	113
	2411	M 5	MC29	113
	2412	K 7	MC30	113
	2413	I 2	MC31	112
	2414	M 4	MC32	112
	2420	B 1	MC33	111
	2421	B 2	MC34	111
	2423	B 3	MC35	111
C	2424	B 4	MC36	111
	2425	C 6	MC37	110
	2426	A 2	MC38	110
	2427	A 8	MC40	1 9
	2428	A 9	MC41	1 9
	2429	A 10	MC42	1 8
	2430	B 11	MC43	E 1
D	2431	A 1	MC44	G 7
	2432	B 6	MC45	G 7
	2433	D 7		
	2434	B 5		
	2435	D 7		
	2906	E 6		
	2907	F 6		
	2908	F 6		
E	2909	F 6		
	2910	E 4		
	2912	E 5		
	2913	I 8		
	2914	I 8		
	2915	G 15		
	2916	G 15		
	2917	F 1		
F	2918	C 14		
	2919	D 14		
	2920	D 14		
	2921	H 14		
	2922	D 8		
	2923	E 6		
	3401	L 7		
	3402	M 7		
G	3403	M 5		
	3404	L 6		
	3405	M 9		
	3406	K 7		
	3417	C 1		
	3418	C 1		
	3419	B 1		
H	3420	B 3		
	3421	A 3		
	3422	B 5		
	3423	A 4		
	3424	A 4		
	3425	A 5		
	3426	C 5		
	3430	A 2		
I	3431	B 8		
	3432	A 2		
	3433	A 1		
	3434	A 1		
	3435	B 8		
	3436	A 7		
	3437	A 9		
	3438	B 11		
J	3439	C 6		
	3913	C 14		
	3915	F 15		
	3916	G 6		
	3917	E 3		
	3918	E 3		
	3923	H 14		
	3924	F 15		
K	3931	H 8		
	3932	C 14		
	3933	C 14		
	3934	D 9		
	3935	D 11		
	3951	H 7		
	3952	G 6		
	3953	G 7		
L	3958	H 8		
	4902	H 7		
	4907	111		
	4908	111		
	4902	1 2		
	5905	E 5		
	5906	F 5		
	5909	E 5		
M	5910	F 5		
	6420	A 10		
	6430	C 7		
	6904	D 15		
	7401	L 9		

22DC588/71

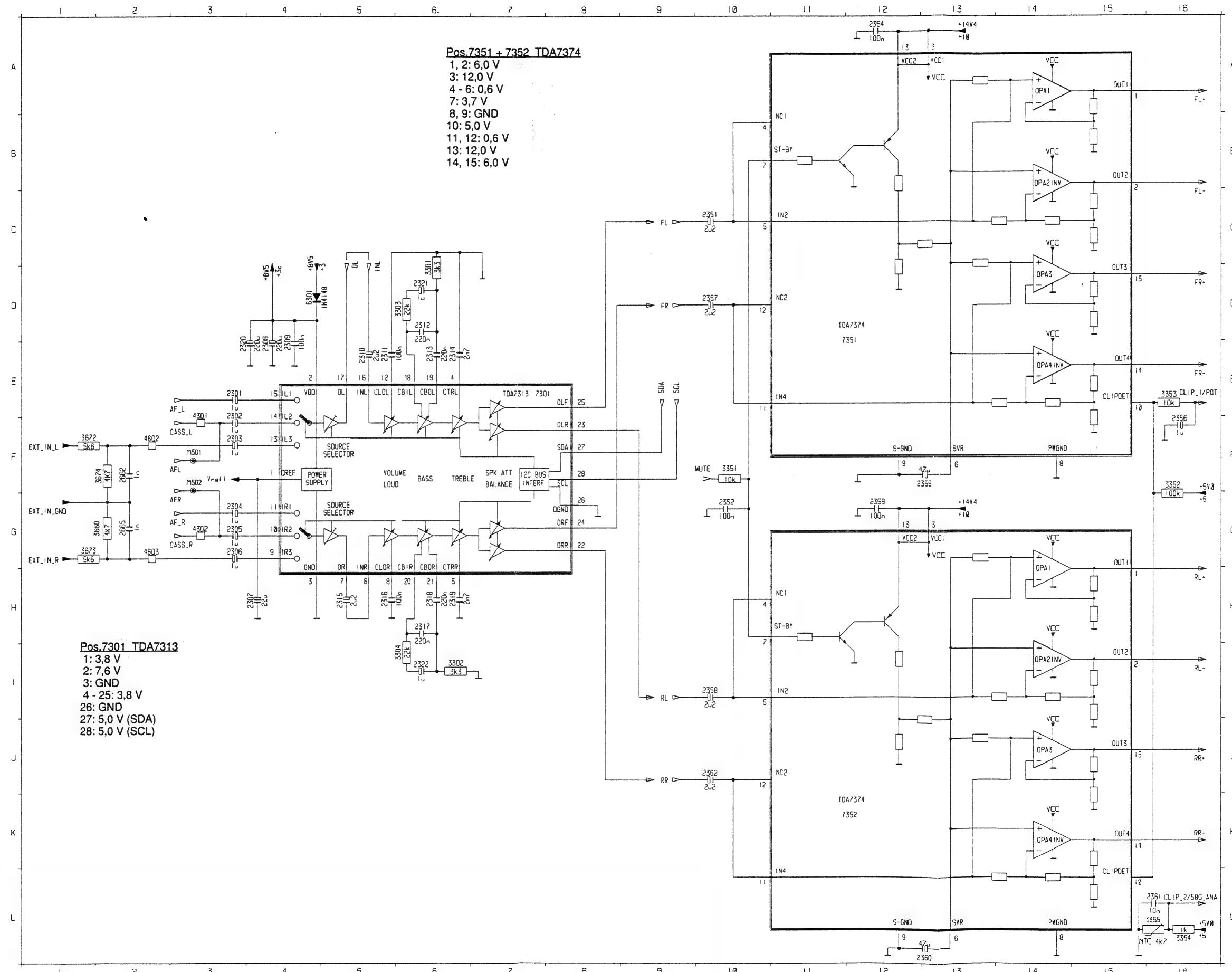
Pos.7911 83CE558

- 1: GND
- 2: 5,0 V
- 3: GND
- 4: 5,0 V
- 5: 4,0 V
- 6: 4,9 V
- 7: 5,3 V
- 8: 4,5 V (ON WITH IGN.OFF)
- 9: 3,9 V
- 10: 1,0...6,0 V (LEVELDEP.)
- 11: 3,0...5,0 V (LEVELDEP.)
- 12: 0,0 V
- 13: GND
- 14: 5,0 V
- 15: GND
- 16 - 19: 5,0 V
- 20: 5,0 V
- 21: 0,0 V (MONO RECEPTION)
- 22: 5,0 V
- 23: NC
- 24: 0,6 V / 5,0 V (OFF)
- 25: 5,0 V / LOW (SEARCH)
- 26: 5,0 V
- 27: 4,4 V
- 28: 5,0 V
- 29: GND
- 30: 0,0 V
- 31, 32: 5,0 V
- 33: 0,0 V
- 34, 35: 5,0 V
- 36: 5,0 V / LOW (SEARCH)
- 37: 0,0 V / HIGH (SEARCH)
- 38: 0,0 V
- 39: 5,0 V (SCL)
- 40: 5,0 V (SDA)
- 41: 5,0 V
- 42: 0,0 V
- 43: 2,4 V
- 44: 0,0 V
- 45: 5,0 V (CASS.STANDBY)
- 46: 0,0 V
- 47: 5,0 V
- 48: ca. 2,0 V
- 49, 50: NC
- 51: 2,6 V (11 MHz)
- 52: 2,0 V (11 MHz)
- 53: 5,0 V
- 54: 0,0 V
- 55, 56: 5,0 V
- 57: 4,3 V / 0,0 V (DOLBY ON)
- 58: NC
- 59: 0,0 V
- 60: 0,1 V / 3,6 V (WIND, MSS)
- 61: 5,0 V
- 62: 0,5 V / 5,0 V (OFF)
- 63: 5,0 V
- 64: 0,0 V
- 65, 66: 5,0 V
- 67: GND
- 68: 0,0 V
- 69: 5,0 V
- 70: 3,8 V (ON WITH IGN. OFF)
- 71: 5,0 V (SDA)
- 72: 2,5 V (NOR) / 0,0 V (REV)
- 73, 74: 5,2 V
- 75, 76: 5,0 V
- 77: GND
- 78, 79: NC
- 80: 5,0 V

Pos.7912 ST24C16

- 1 - 4: GND
- 5: 4,8 V (SDA)
- 6: 4,8 V (SCL)
- 7: GND
- 8: 5,0 V

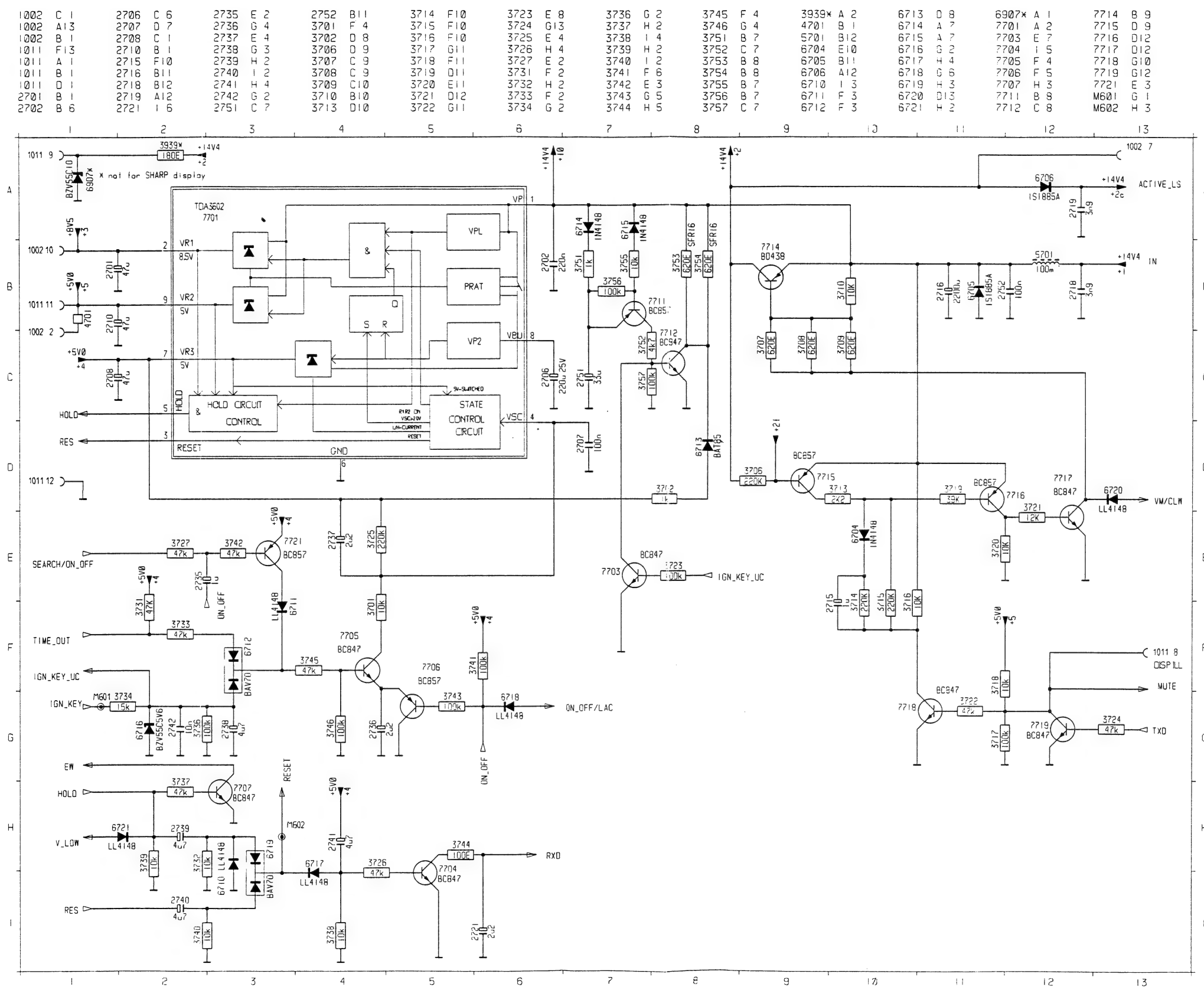
## AUDIO CONTROL / AF POWER STAGE



2301 E 3  
2302 F 3  
2303 G 3  
2304 G 3  
2305 G 3  
2306 G 3  
2307 H 4  
2308 E 4  
2309 E 4  
2310 E 4  
2311 E 4  
2312 E 4  
2313 E 4  
2314 E 4  
2315 E 4  
2316 E 4  
2317 E 4  
2318 E 4  
2319 E 4  
2320 E 4  
2321 E 4  
2322 E 4  
2323 E 4  
2324 E 4  
2325 E 4  
2326 E 4  
2327 E 4  
2328 E 4  
2329 E 4  
2330 E 4  
2331 E 4  
2332 E 4  
2333 E 4  
2334 E 4  
2335 E 4  
2336 E 4  
2337 E 4  
2338 E 4  
2339 E 4  
2340 E 4  
2341 E 4  
2342 E 4  
2343 E 4  
2344 E 4  
2345 E 4  
2346 E 4  
2347 E 4  
2348 E 4  
2349 E 4  
2350 E 4  
2351 E 4  
2352 E 4  
2353 E 4  
2354 E 4  
2355 E 4  
2356 E 4  
2357 E 4  
2358 E 4  
2359 E 4  
2360 E 4  
2361 E 4  
2362 E 4  
2363 E 4  
2364 E 4  
2365 E 4  
2366 E 4  
2367 E 4  
2368 E 4  
2369 E 4  
2370 E 4  
2371 E 4  
2372 E 4  
2373 E 4  
2374 E 4  
2375 E 4  
2376 E 4  
2377 E 4  
2378 E 4  
2379 E 4  
2380 E 4  
2381 E 4  
2382 E 4  
2383 E 4  
2384 E 4  
2385 E 4  
2386 E 4  
2387 E 4  
2388 E 4  
2389 E 4  
2390 E 4  
2391 E 4  
2392 E 4  
2393 E 4  
2394 E 4  
2395 E 4  
2396 E 4  
2397 E 4  
2398 E 4  
2399 E 4  
2400 E 4

4301 E 3  
4302 F 3  
4303 G 3  
4304 G 3  
4305 G 3  
4306 G 3  
4307 H 4  
4308 E 4  
4309 E 4  
4310 E 4  
4311 E 4  
4312 E 4  
4313 E 4  
4314 E 4  
4315 E 4  
4316 E 4  
4317 E 4  
4318 E 4  
4319 E 4  
4320 E 4  
4321 E 4  
4322 E 4  
4323 E 4  
4324 E 4  
4325 E 4  
4326 E 4  
4327 E 4  
4328 E 4  
4329 E 4  
4330 E 4  
4331 E 4  
4332 E 4  
4333 E 4  
4334 E 4  
4335 E 4  
4336 E 4  
4337 E 4  
4338 E 4  
4339 E 4  
4340 E 4  
4341 E 4  
4342 E 4  
4343 E 4  
4344 E 4  
4345 E 4  
4346 E 4  
4347 E 4  
4348 E 4  
4349 E 4  
4350 E 4  
4351 E 4  
4352 E 4  
4353 E 4  
4354 E 4  
4355 E 4  
4356 E 4  
4357 E 4  
4358 E 4  
4359 E 4  
4360 E 4  
4361 E 4  
4362 E 4  
4363 E 4  
4364 E 4  
4365 E 4  
4366 E 4  
4367 E 4  
4368 E 4  
4369 E 4  
4370 E 4  
4371 E 4  
4372 E 4  
4373 E 4  
4374 E 4  
4375 E 4  
4376 E 4  
4377 E 4  
4378 E 4  
4379 E 4  
4380 E 4  
4381 E 4  
4382 E 4  
4383 E 4  
4384 E 4  
4385 E 4  
4386 E 4  
4387 E 4  
4388 E 4  
4389 E 4  
4390 E 4  
4391 E 4  
4392 E 4  
4393 E 4  
4394 E 4  
4395 E 4  
4396 E 4  
4397 E 4  
4398 E 4  
4399 E 4  
4400 E 4

## POWER SUPPLY



Pos.6712\_BAV70  
1: 5,2 V / 0,0 V (ON WITH IGN.OFF)  
2: 5,0 V / 2,7 V (ON WITH IGN.OFF)  
3: 4,8 V / 2,3 V (ON WITH IGN.OFF)

Pos.6719 BAV70

1: 0,0 V  
2: 0,0 V  
3: 0,0 V

Pos.7701 TDA3602

1: 12,0 V  
2: 8,5 V  
3: 5,0 V  
4: 0,8 V / 5,0 V (OFF)  
5: 5,0 V  
6: GND  
7: 5,0 V  
8: 12,0 V  
9: 5,0 V

Pos.7703 BC857

B: 0,6 V / 0,1 V (ON WITH IGN.OFF)  
C: 0,0 V  
E: GND

Pos.7704 BC857

B: 0,0 V  
C: 5,0 V  
E: GND

Pos.7705 BC857

B: 1,2 V  
C: 0,5 V / 5,0 V (OFF)  
E: 0,5 V / 2,9 V (OFF)

Pos.7706 BC847

B: 0,0 V / 5,0 V (OFF)  
C: GND  
E: 0,5 V / 2,9 V (OFF)

Pos.7711 BC857

B: 12,0 V  
C: 0,0 V  
E: 12,0 V

Pos.7712 BC847

B: 0,0 V  
C: 12,0 V  
E: GND

Pos.7714 BD438

B: 12,0 V  
C: 12,0 V / 0,5 V (IGN.OFF)  
E: 12,0 V

Pos.7715 BC857

B: 12,0 V  
C: 8,6 V / 12,0 V IGN.OFF)  
E: 12,0 V

Pos.7716 BC857

B: 11,6 V / 12,0 V (OFF)  
C: 12,0 V / 0,0 V (OFF)  
E: 12,0 V

Pos.7717 BC847

B: 0,8 V  
C: 0,2 V / 12,0 V (OFF)  
E: GND

Pos.7718 BC847

B: 0,6 V  
C: 0,0 V / 12,0 V (OFF)  
E: GND

Pos.7719 BC847

B: 0,0 V / 0,6 V (OFF)  
C: 4,5 V  
E: GND

Pos.7721 BC857

B: 5,0 V / 4,4 V (PUSH SEARCH KNOB)  
C: 0,0 V / 5,0 V (PUSH SEARCH KNOB)  
E: 5,0 V

## CONNECTORBLOCK / BUS MODUL / GALA / SUBWOOFER CONTROL

Pos.7551 BC847

B: 0,5 V

C: 0,0 V

E: GND

Pos.7901 HEF4557BT

(measured without CD-Changer contacted)

1, 2: 5,0 V

3: GND  
4: 5.0V

4: 5,0 V  
5: 0,0 V

5: 0,0 V  
6: 5,0 V

7, 8: GND

9: 0.0 V

10: 5,0 V

11: NC

12 - 16: 5,0 V

Pos.7902 BC847

B: 0,0 V

C: 0,0 V  
E: GND

E: GND

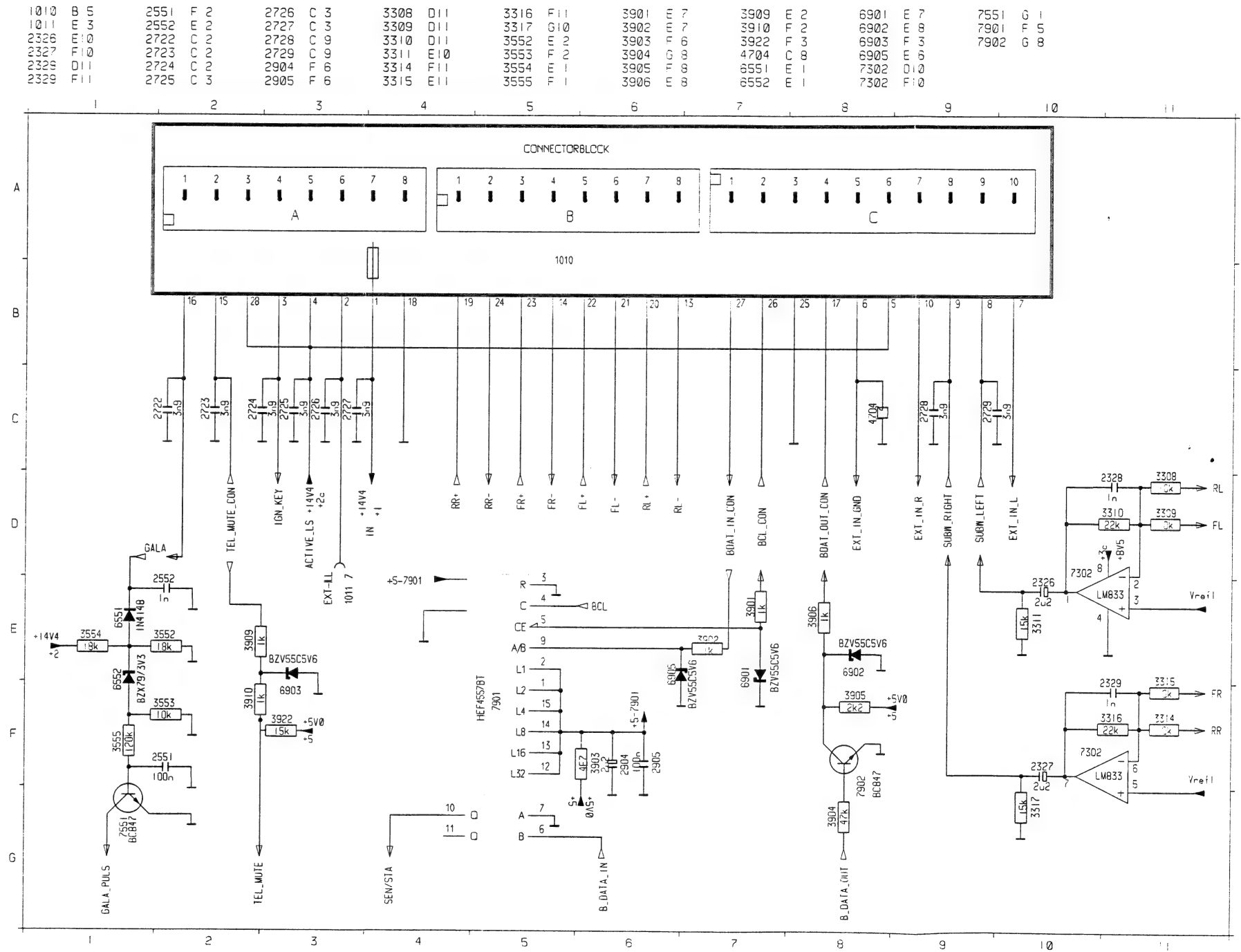
Pos.7302 LM833

1 - 3: 3,8 V

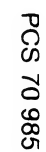
4: GND  
5: 3.3V

5-7: 3,8 V  
8: 7,6 V

8: 7,6 V









## MECHANICAL PARTS

21	4822	423	41246	COVER GAMMA
22	4822	423	41228	COVER BOTTOM ASSY
23	4822	492	71352	SPRING CENTRE
25	4822	502	11689	M 3 X 6CSK ZNBK
26	4822	413	31746	KNOB VOLUME ASSY
27	4822	413	31776	KNOB TONE ASSY
30	4822	502	11715	M 2,5X 5PAN ZNBK
33	4822	502	11715	M 2,5X 5PAN ZNBK
36	4822	502	11715	M 2,5X 5PAN ZNBK
37	4822	502	11715	M 2,5X 5PAN ZNBK
1001-1004	4822	267	40818	TCS83S9V1 BURNDY
1001-1008	4822	210	10579	FM MODUL
1001-1010	4822	290	61187	CONNECTOR BLOCK ASSY
1001-1011	4822	267	51057	CONNECTOR 12P
1002	4822	701	13642	SCA4.4
1003-1	4822	459	50799	ORNAMENTAL PLATE
1003-1-3	4822	443	64036	CASSETTE FLAP
1003-1-4	4822	492	42481	FLAP SPRING
1003-1001	4822	214	52127	PWB LCD ASSY
1003-1001-1801	4822	267	51287	AMP0-215460-01
1003-1001-1805	4822	265	41315	CONNECTOR 10P
1003-1002	4822	214	52124	PWB SWITCH ASSY
1004-2	4822	321	62208	CABLE ASSY POTMETER
1004-1001	4822	214	52125	PWB POTI ASSY TONE
1004-1002	4822	214	52126	PWB POTI ASSY VOLUME
1005	4822	071	21003	257010.(FUSE 10A)
1006	4822	267	31702	BUSH AERIAL ASSY

### How to find Codenumbers:

This exploded view is illustrated in a multi-level form. To find the correct codenumber you have to combine the position number of the needed part with the position number of the assembly in which it is in.

Only the position numbers connected to a codenumber are available as spare part.

**MISCELLANEOUS**

1201	4822 242 72076	QUARZ 10,7 MHZ
1202	4822 242 72076	QUARZ 10,7 MHZ
1203	4822 242 71883	SFE10,7MS318-D
1204	4822 242 71883	SFE10,7MS318-D
1251	4822 242 71874	QUARZ 4,0 MHZ
1402	4822 242 72195	QUARZ 4,332 MHZ
1601	4822 242 81117	CSB456F11
1866	4822 276 20521	SWITCH FF
1867	4822 276 20521	SWITCH FR
1868	4822 276 20521	SWICH EJECT

**CAPACITORS**

2101	4822 124 23256	47UF	16V
2102	5322 122 32654	22NF 10% X7R	63V
2104	4822 122 33177	10NF 20% X7R	50V
2106	4822 122 33177	10NF 20% X7R	50V
2107	5322 122 32654	22NF 10% X7R	63V
2108	4822 124 40177	47UF 20%	10V
2109	4822 122 33177	10NF 20% X7R	50V
2110	4822 122 33177	10NF 20% X7R	50V
2111	4822 122 33177	10NF 20% X7R	50V
2201	5322 122 31647	1NF 10% X7R	63V
2202	4822 122 32082	4,7PF 5%	50V
2203	5322 122 32659	33PF 5%	50V
2204	5322 122 32448	10PF 5%	50V
2205	4822 122 33216	270PF 5% NP0	50V
2206	4822 122 33216	270PF 5% NP0	50V
2208	4822 124 23282	1UF 20%	50V
2209	4822 124 23256	47UF	16V
2210	4822 122 33496	100NF 10% X7R	63V
2211	4822 122 33177	10NF 20% X7R	50V
2212	4822 122 32916	220NF 10% X7R	63V
2213	4822 122 33177	10NF 20% X7R	50V
2214	4822 122 33496	100NF 10% X7R	63V
2215	4822 124 23279	22UF 20%	16V
2217	4822 122 33496	100NF 10% X7R	63V
2218	4822 124 22646	47UF 20%	16V
2219	4822 121 51354	1NF 10%	50V
2220	5322 126 10223	4,7NF 10% X7R	63V
2221	4822 122 32627	2.7NF 10% X7R	50V
2222	4822 122 32542	47NF 10% X7R	63V
2223	5322 122 32658	22PF 5%	50V
2230	4822 122 33178	1NF 20% X7R	50V
2231	4822 122 32082	4,7PF 5%	50V
2232	5322 122 32448	10PF 5%	50V
2233	5322 122 32658	22PF 5%	50V
2240	5322 122 32654	22NF 10% X7R	63V
2241	4822 122 33177	10NF 20% X7R	50V
2242	4822 122 32082	4,7PF 5%	50V
2243	4822 122 33216	270PF 5% NP0	50V
2246	4822 122 33177	10NF 20% X7R	50V
2251	4822 122 32566	3,9NF 10% X7R	63V
2252	4822 122 33177	10NF 20% X7R	50V
2253	5322 122 32654	22NF 10% X7R	63V
2254	4822 122 33608	39NF 10% X7R	63V
2255	4822 122 32916	220NF 10% X7R	63V
2256	5322 122 32654	22NF 10% X7R	63V
2257	4822 124 23281	33UF 20%	16V
2258	4822 122 33177	10NF 20% X7R	50V
2259	4822 124 23255	100UF	16V
2261	4822 122 32916	220NF 10% X7R	63V

**CAPACITORS**

2301	4822 124 23282	1UF 20%	50V
2302	4822 124 23282	1UF 20%	50V
2303	4822 124 23282	1UF 20%	50V
2304	4822 124 23282	1UF 20%	50V
2305	4822 124 23282	1UF 20%	50V
2306	4822 124 23282	1UF 20%	50V
2307	4822 124 80453	100UF 20%	10V
2309	4822 122 33496	100NF 10% X7R	63V
2310	4822 124 23504	2.2UF 20%	50V
2311	4822 122 33496	100NF 10% X7R	63V
2312	4822 122 32916	220NF 10% X7R	63V
2313	4822 122 32542	47NF 10% X7R	63V
2314	4822 122 32627	2.7NF 10% X7R	50V
2315	4822 124 23504	2.2UF 20%	50V
2316	4822 122 33496	100NF 10% X7R	63V
2317	4822 122 32916	220NF 10% X7R	63V
2318	4822 122 32542	47NF 10% X7R	63V
2319	4822 122 32627	2.7NF 10% X7R	50V
2320	4822 124 23582	220UF	10V
2326	4822 124 23504	2.2UF 20%	50V
2327	4822 124 23504	2.2UF 20%	50V
2328	4822 122 33178	1NF 20% X7R	50V
2329	4822 122 33178	1NF 20% X7R	50V
2351	4822 124 23504	2.2UF 20%	50V
2352	4822 122 33496	100NF 10% X7R	63V
2354	4822 122 33496	100NF 10% X7R	63V
2355	4822 124 80724	47UF 20%	10V
2356	4822 124 80725	1UF 20%	50V
2357	4822 124 23504	2.2UF 20%	50V
2358	4822 124 23504	2.2UF 20%	50V
2359	4822 122 33496	100NF 10% X7R	63V
2360	4822 124 80724	47UF 20%	10V
2361	4822 122 33177	10NF 20% X7R	50V
2362	4822 124 23504	2.2UF 20%	50V
2401	4822 124 23504	2.2UF 20%	50V
2402	4822 124 23504	2.2UF 20%	50V
2403	4822 124 41017	10UF	16V
2404	4822 122 33177	10NF 20% X7R	50V
2405	4822 122 33218	820PF 10% X7R	63V
2406	4822 122 33496	100NF 10% X7R	63V
2407	4822 122 33216	270PF 5% NP0	50V
2408	4822 124 22646	47UF 20%	16V
2409	4822 124 23504	2.2UF 20%	50V
2410	5322 122 31946	27PF 10%	50V
2411	5322 122 31946	27PF 10%	50V
2412	4822 122 33496	100NF 10% X7R	63V
2413	4822 122 33177	10NF 20% X7R	50V
2414	4822 124 23504	2.2UF 20%	50V
2420	5322 122 33538	150PF 2% NP0	63V
2421	5322 122 33538	150PF 2% NP0	63V
2423	5322 122 33538	150PF 2% NP0	63V
2424	5322 122 33538	150PF 2% NP0	63V
2425	5322 122 32448	10PF 5%	50V
2426	4822 122 33177	10NF 20% X7R	50V
2427	4822 122 32614	1.2NF 10% X7R	50V
2428	5322 122 31865	1.5NF 10% X7R	63V
2429	4822 122 33177	10NF 20% X7R	50V
2430	4822 124 23401	4.7UF 20%	25V
2431	4822 124 41017	10UF	16V
2432	4822 122 33496	100NF 10% X7R	63V
2433	5322 122 32654	22NF 10% X7R	63V

**CAPACITORS**

2434	4822	122	33178	1NF	20% X7R	50V
2435	4822	122	33178	1NF	20% X7R	50V
2501	4822	122	33173	560PF	10% X7R	50V
2502	4822	122	33173	560PF	10% X7R	50V
2503	4822	124	40177	47UF	20%	10V
2504	4822	122	32646	5,6NF	10% X7R	50V
2511	4822	122	33173	560PF	10% X7R	50V
2512	4822	122	33173	560PF	10% X7R	50V
2513	4822	124	40177	47UF	20%	10V
2514	4822	122	32646	5,6NF	10% X7R	50V
2520	4822	124	41017	10UF		16V
2521	4822	124	40177	47UF	20%	10V
2524	4822	122	33178	1NF	20% X7R	50V
2525	4822	122	32916	220NF	10% X7R	63V
2526	4822	124	41017	10UF		16V
2527	4822	124	23282	1UF	20%	50V
2535	4822	124	23282	1UF	20%	50V
2536	4822	124	23282	1UF	20%	50V
2537	4822	126	12106	220NF	5%	
2538	4822	126	12106	220NF	5%	
2540	4822	124	41017	10UF		16V
2541	4822	124	41017	10UF		16V
2542	4822	124	23282	1UF	20%	50V
2551	4822	122	33496	100NF	10% X7R	63V
2601	4822	124	23282	1UF	20%	50V
2602	4822	122	33514	68PF	5% NP0	50V
2605	4822	122	33496	100NF	10% X7R	63V
2606	4822	124	23281	33UF	20%	16V
2607	5322	122	32268	470PF	10%	50V
2608	4822	122	33496	100NF	10% X7R	63V
2610	4822	124	41017	10UF		16V
2611	4822	124	23282	1UF	20%	50V
2612	4822	122	33496	100NF	10% X7R	63V
2613	4822	122	32916	220NF	10% X7R	63V
2614	5322	122	32654	22NF	10% X7R	63V
2615	4822	122	33496	100NF	10% X7R	63V
2616	5322	122	32268	470PF	10%	50V
2617	5322	122	33538	150PF	2% NP0	63V
2618	5322	122	31866	6,8NF	10% X7R	63V
2619	5322	122	31866	6,8NF	10% X7R	63V
2620	5322	122	32531	100PF	5% NP0	50V
2621	5322	122	32531	100PF	5% NP0	50V
2623	4822	122	33178	1NF	20% X7R	50V
2626	4822	122	33216	270PF	5% NP0	50V
2662	4822	122	33178	1NF	20% X7R	50V
2665	4822	122	33178	1NF	20% X7R	50V
2701	4822	124	80724	47UF	20%	10V
2702	4822	122	32916	220NF	10% X7R	63V
2706	4822	124	41097	220UF	20%	16V
2707	4822	122	33496	100NF	10% X7R	63V
2708	4822	124	80724	47UF	20%	10V
2710	4822	124	80724	47UF	20%	10V
2715	4822	124	23282	1UF	20%	50V
2718	4822	122	32566	3,9NF	10% X7R	63V
2719	4822	122	32566	3,9NF	10% X7R	63V
2721	4822	124	80726	2,2UF	20%	50V
2722	4822	122	32566	3,9NF	10% X7R	63V
2723	4822	122	32566	3,9NF	10% X7R	63V
2724	4822	122	32566	3,9NF	10% X7R	63V
2725	4822	122	32566	3,9NF	10% X7R	63V
2726	4822	122	32566	3,9NF	10% X7R	63V

**CAPACITORS**

2727	4822	122	32566	3,9NF	10% X7R	63V
2728	4822	122	32566	3,9NF	10% X7R	63V
2729	4822	122	32566	3,9NF	10% X7R	63V
2735	4822	124	23282	1UF	20%	50V
2736	4822	124	23504	2,2UF	20%	50V
2737	4822	124	23504	2,2UF	20%	50V
2738	4822	124	23401	4,7UF	20%	25V
2739	4822	124	23401	4,7UF	20%	25V
2740	4822	124	23401	4,7UF	20%	25V
2741	4822	124	80727	4,7UF	20%	25V
2742	4822	122	33177	10NF	20% X7R	50V
2751	4822	124	23281	33UF	20%	16V
2752	4822	122	33496	100NF	10% X7R	63V
2801	5322	122	33869	15PF	5% NP0	63V
2802	5322	122	33869	15PF	5% NP0	63V
2803	4822	122	33496	100NF	10% X7R	63V
2804	4822	122	33496	100NF	10% X7R	63V
2805	4822	122	33496	100NF	10% X7R	63V
2806	4822	122	33496	100NF	10% X7R	63V
2807	4822	122	33496	100NF	10% X7R	63V
2808	4822	122	32566	3,9NF	10% X7R	63V
2809	4822	122	32566	3,9NF	10% X7R	63V
2810	4822	122	32566	3,9NF	10% X7R	63V
2811	4822	122	32566	3,9NF	10% X7R	63V
2812	4822	122	32566	3,9NF	10% X7R	63V
2904	4822	124	23504	2,2UF	20%	50V
2905	4822	122	33496	100NF	10% X7R	63V
2906	5322	122	32268	470PF	10%	50V
2907	4822	122	33342	33NF	10% X7R	63V
2908	4822	122	33342	33NF	10% X7R	63V
2909	4822	122	33178	1NF	20% X7R	50V
2910	4822	122	33178	1NF	20% X7R	50V
2912	4822	122	33178	1NF	20% X7R	50V
2913	5322	122	32965	18PF	5% NPO	50V
2914	5322	122	32661	56PF	5%	50V
2915	4822	124	41017	10UF		16V
2916	4822	122	33496	100NF	10% X7R	63V
2917	4822	122	33496	100NF	10% X7R	63V
2918	4822	122	33177	10NF	20% X7R	50V
2919	4822	122	33177	10NF	20% X7R	50V
2920	4822	122	33177	10NF	20% X7R	50V
2921	4822	122	33178	1NF	20% X7R	50V
2922	4822	122	33178	1NF	20% X7R	50V
2923	4822	122	32627	2,7NF	10% X7R	50V
2925	4822	122	32891	68NF	10% X7R	63V
2926	4822	124	80264	1,5UF	20%	50V

**RESISTORS**

3101	4822	051	20478	4R70	5%	0,1W
3102	4822	051	20102	1K00	5%	0,1W
3103	4822	051	20221	220R005%		0,1W
3105	4822	100	11163	100K	30% LIN	0,1W
3106	4822	051	20478	4R70	5%	0,1W
3107	4822	051	20273	27K00	5%	0,1W
3201	4822	051	20561	560R005%		0,1W
3202	4822	051	20471	470R005%		0,1W
3205	4822	051	20102	1K00	5%	0,1W
3206	4822	051	20102	1K00	5%	0,1W
3207	4822	051	20153	15K00	5%	0,1W
3208	4822	051	20333	33K00	5%	0,1W
3212	4822	051	20472	4K70	5%	0,1W

**RESISTORS**

3215	4822 051 20103	10K00 5%	0,1W
3216	4822 051 20104	100K005%	0,1W
3217	4822 051 20103	10K00 5%	0,1W
3218	4822 051 20103	10K00 5%	0,1W
3219	4822 051 20224	220K005%	0,1W
3230	4822 051 20224	220K005%	0,1W
3231	4822 051 20152	1K50 5%	0,1W
3232	4822 051 20104	100K005%	0,1W
3240	4822 051 20472	4K70 5%	0,1W
3241	4822 051 20102	1K00 5%	0,1W
3242	4822 051 20229	22R00 5%	0,1W
3243	4822 051 20101	100R005%	0,1W
3244	4822 051 20102	1K00 5%	0,1W
3251	4822 051 20103	10K00 5%	0,1W
3252	4822 051 20103	10K00 5%	0,1W
3253	4822 051 20472	4K70 5%	0,1W
3256	4822 051 20102	1K00 5%	0,1W
3301	4822 051 20153	15K00 5%	0,1W
3302	4822 051 20153	15K00 5%	0,1W
3308	4822 051 20103	10K00 5%	0,1W
3309	4822 051 20103	10K00 5%	0,1W
3310	4822 051 20223	22K00 5%	0,1W
3311	4822 051 20153	15K00 5%	0,1W
3314	4822 051 20103	10K00 5%	0,1W
3315	4822 051 20103	10K00 5%	0,1W
3316	4822 051 20223	22K00 5%	0,1W
3317	4822 051 20153	15K00 5%	0,1W
3351	4822 051 20103	10K00 5%	0,1W
3352	4822 051 20104	100K005%	0,1W
3353	4822 051 20103	10K00 5%	0,1W
3354	4822 051 20102	1K00 5%	0,1W
3355	4822 116 30426	4K7 3%	0,1W
3401	4822 051 20683	68K00 5%	0,1W
3402	4822 051 20223	22K00 5%	0,1W
3403	4822 051 20225	2M20 5%	0,1W
3404	4822 051 20104	100K005%	0,1W
3405	4822 051 20334	330K005%	0,1W
3406	4822 051 20221	220R005%	0,1W
3417	4822 051 20103	10K00 5%	0,1W
3418	4822 051 20103	10K00 5%	0,1W
3419	4822 051 20103	10K00 5%	0,1W
3420	4822 051 20183	18K00 5%	0,1W
3421	4822 051 20393	39K00 5%	0,1W
3422	4822 051 20103	10K00 5%	0,1W
3423	4822 051 20103	10K00 5%	0,1W
3424	4822 051 20393	39K00 5%	0,1W
3425	4822 051 20393	39K00 5%	0,1W
3426	4822 100 12071	EVNDXAA03B25	
3430	4822 051 20393	39K00 5%	0,1W
3431	4822 051 20103	10K00 5%	0,1W
3432	4822 051 20103	10K00 5%	0,1W
3433	4822 051 20332	3K30 5%	0,1W
3434	4822 051 20332	3K30 5%	0,1W
3435	4822 051 20561	560R005%	0,1W
3436	4822 051 20332	3K30 5%	0,1W
3437	4822 051 20683	68K00 5%	0,1W
3438	4822 051 20103	10K00 5%	0,1W
3439	4822 051 20224	220K005%	0,1W
3501	4822 051 20473	47K00 5%	0,1W
3502	4822 051 20473	47K00 5%	0,1W
3503	4822 051 20101	100R005%	0,1W

**RESISTORS**

3504	4822 100 11681	1K 30%	0,1W
3505	4822 051 20474	470K005%	0,1W
3506	4822 051 20333	33K00 5%	0,1W
3507	4822 051 20563	56K00 5%	0,1W
3508	4822 051 20103	10K00 5%	0,1W
3509	4822 051 20332	3K30 5%	0,1W
3511	4822 051 20473	47K00 5%	0,1W
3512	4822 051 20473	47K00 5%	0,1W
3513	4822 051 20101	100R005%	0,1W
3514	4822 100 11681	1K 30%	0,1W
3515	4822 051 20474	470K005%	0,1W
3516	4822 051 20333	33K00 5%	0,1W
3517	4822 051 20563	56K00 5%	0,1W
3518	4822 051 20103	10K00 5%	0,1W
3519	4822 051 20332	3K30 5%	0,1W
3520	4822 051 20101	100R005%	0,1W
3521	4822 051 20103	10K00 5%	0,1W
3522	4822 051 20223	22K00 5%	0,1W
3523	4822 051 20223	22K00 5%	0,1W
3524	4822 051 20104	100K005%	0,1W
3525	4822 051 20331	330R005%	0,1W
3526	4822 051 20101	100R005%	0,1W
3527	4822 051 20333	33K00 5%	0,1W
3540	4822 051 20223	22K00 5%	0,1W
3541	4822 051 20223	22K00 5%	0,1W
3548	4822 051 10183	18K00 2%	0,25W
3550	4822 051 20473	47K00 5%	0,1W
3552	4822 051 20183	18K00 5%	0,1W
3553	4822 051 20103	10K00 5%	0,1W
3554	4822 051 20183	18K00 5%	0,1W
3555	4822 051 20124	120K005%	0,1W
3601	4822 051 20103	10K00 5%	0,1W
3603	4822 051 20474	470K005%	0,1W
3604	4822 051 20154	150K005%	0,1W
3605	4822 051 20304	300K005%	0,1W
3606	4822 051 20104	100K005%	0,1W
3607	4822 051 20823	82K00 5%	0,1W
3608	4822 100 12071	EVNDXAA03B25	
3610	4822 051 20102	1K00 5%	0,1W
3612	4822 051 20391	390R005%	0,1W
3613	4822 051 20473	47K00 5%	0,1W
3614	4822 051 20182	1K80 5%	0,1W
3615	4822 051 20123	12K00 5%	0,1W
3616	4822 051 20109	10R00 5%	0,1W
3617	4822 051 20473	47K00 5%	0,1W
3619	4822 051 20104	100K005%	0,1W
3621	4822 051 20273	27K00 5%	0,1W
3622	4822 051 20824	820K005%	0,1W
3623	4822 051 20273	27K00 5%	0,1W
3624	4822 051 20474	470K005%	0,1W
3625	4822 051 20273	27K00 5%	0,1W
3626	4822 051 20104	100K005%	0,1W
3627	4822 051 20222	2K20 5%	0,1W
3628	4822 051 20224	220K005%	0,1W
3629	4822 051 20472	4K70 5%	0,1W
3630	4822 100 11683	2K 30%LIN	0,2W
3631	4822 051 20563	56K00 5%	0,1W
3632	4822 051 20563	56K00 5%	0,1W
3635	4822 051 20225	2M20 5%	0,1W
3636	4822 051 20225	2M20 5%	0,1W
3638	4822 051 20103	10K00 5%	0,1W

**RESISTORS**

3639	4822 051	20008	0R0	JUMP(0805)
3641	4822 051	20473	47K00	5% 0,1W
3642	4822 051	20473	47K00	5% 0,1W
3660	4822 051	20472	4K70	5% 0,1W
3672	4822 051	20562	5K60	5% 0,1W
3673	4822 051	20562	5K60	5% 0,1W
3674	4822 051	20472	4K70	5% 0,1W
3701	4822 051	20103	10K00	5% 0,1W
3702	4822 051	20102	1K00	5% 0,1W
3706	4822 051	20224	220K00	5% 0,1W
3707	4822 116	52227	620E	5% 0,5W
3708	4822 116	52227	620E	5% 0,5W
3709	4822 116	52227	620E	5% 0,5W
3710	4822 051	20103	10K00	5% 0,1W
3713	4822 051	20222	2K20	5% 0,1W
3714	4822 051	20224	220K00	5% 0,1W
3715	4822 051	20224	220K00	5% 0,1W
3716	4822 051	20103	10K00	5% 0,1W
3717	4822 051	20104	100K00	5% 0,1W
3718	4822 051	20102	1K00	5% 0,1W
3719	4822 051	20393	39K00	5% 0,1W
3720	4822 051	20103	10K00	5% 0,1W
3721	4822 051	20123	12K00	5% 0,1W
3722	4822 051	20473	47K00	5% 0,1W
3723	4822 051	20104	100K00	5% 0,1W
3724	4822 051	20473	47K00	5% 0,1W
3725	4822 051	20224	220K00	5% 0,1W
3726	4822 051	20473	47K00	5% 0,1W
3727	4822 051	20473	47K00	5% 0,1W
3731	4822 051	20473	47K00	5% 0,1W
3732	4822 051	20103	10K00	5% 0,1W
3733	4822 051	20473	47K00	5% 0,1W
3734	4822 051	20153	15K00	5% 0,1W
3736	4822 051	20104	100K00	5% 0,1W
3737	4822 051	20473	47K00	5% 0,1W
3738	4822 051	20103	10K00	5% 0,1W
3739	4822 051	20103	10K00	5% 0,1W
3740	4822 051	20103	10K00	5% 0,1W
3741	4822 051	20104	100K00	5% 0,1W
3742	4822 051	20473	47K00	5% 0,1W
3743	4822 051	20104	100K00	5% 0,1W
3744	4822 051	20101	100R00	5% 0,1W
3745	4822 051	20473	47K00	5% 0,1W
3746	4822 051	20104	100K00	5% 0,1W
3751	4822 051	20102	1K00	5% 0,1W
3752	4822 051	20472	4K70	5% 0,1W
3753	4822 116	52227	620E	5% 0,5W
3754	4822 116	52227	620E	5% 0,5W
3755	4822 051	20103	10K00	5% 0,1W
3756	4822 051	20104	100K00	5% 0,1W
3757	4822 051	20104	100K00	5% 0,1W
3801	4822 116	30423	10K	20% NTC
3802	4822 051	20222	2K20	5% 0,1W
3803	4822 051	20103	10K00	5% 0,1W
3804	4822 051	20103	10K00	5% 0,1W
3805	4822 051	20103	10K00	5% 0,1W
3806	4822 051	20103	10K00	5% 0,1W
3807	4822 051	20103	10K00	5% 0,1W
3808	4822 051	20153	15K00	5% 0,1W
3809	4822 051	20153	15K00	5% 0,1W
3810	4822 051	20153	15K00	5% 0,1W

**RESISTORS**

3811	4822 051	20153	15K00	5% 0,1W
3812	4822 051	20152	1K50	5% 0,1W
3813	4822 051	20152	1K50	5% 0,1W
3814	4822 051	20152	1K50	5% 0,1W
3816	4822 051	20153	15K00	5% 0,1W
3817	4822 051	20102	1K00	5% 0,1W
3818	4822 051	20152	1K50	5% 0,1W
3819	4822 051	20153	15K00	5% 0,1W
3820	4822 051	20103	10K00	5% 0,1W
3821	4822 051	20562	5K60	5% 0,1W
3822	4822 051	20152	1K50	5% 0,1W
3823	4822 051	20152	1K50	5% 0,1W
3824	4822 051	20152	1K50	5% 0,1W
3827	4822 051	20102	1K00	5% 0,1W
3828	4822 051	20152	1K50	5% 0,1W
3851	4822 051	20271	270R00	5% 0,1W
3852	4822 051	20271	270R00	5% 0,1W
3853	4822 051	20271	270R00	5% 0,1W
3901	4822 051	20102	1K00	5% 0,1W
3902	4822 051	20102	1K00	5% 0,1W
3903	4822 051	20478	4R70	5% 0,1W
3904	4822 051	20473	47K00	5% 0,1W
3905	4822 051	20222	2K20	5% 0,1W
3906	4822 051	20102	1K00	5% 0,1W
3908	4822 051	20224	220K00	5% 0,1W
3909	4822 051	20102	1K00	5% 0,1W
3910	4822 051	20102	1K00	5% 0,1W
3911	4822 051	20473	47K00	5% 0,1W
3912	4822 051	20224	220K00	5% 0,1W
3913	4822 051	20153	15K00	5% 0,1W
3915	4822 051	20101	100R00	5% 0,1W
3916	4822 051	20153	15K00	5% 0,1W
3917	4822 051	20103	10K00	5% 0,1W
3918	4822 051	20103	10K00	5% 0,1W
3919	4822 051	20153	15K00	5% 0,1W
3920	4822 051	20153	15K00	5% 0,1W
3921	4822 051	20153	15K00	5% 0,1W
3922	4822 051	20153	15K00	5% 0,1W
3923	4822 051	20102	1K00	5% 0,1W
3924	4822 051	20153	15K00	5% 0,1W
3925	4822 051	20822	8K20	5% 0,1W
3927	4822 051	20225	2M20	5% 0,1W
3928	4822 051	20822	8K20	5% 0,1W
3929	4822 051	20221	220R00	5% 0,1W
3930	4822 051	20103	10K00	5% 0,1W
3931	4822 051	20102	1K00	5% 0,1W
3932	4822 051	20153	15K00	5% 0,1W
3933	4822 051	20153	15K00	5% 0,1W
3934	4822 051	20102	1K00	5% 0,1W
3935	4822 051	20102	1K00	5% 0,1W
3936	4822 051	20103	10K00	5% 0,1W
3937	4822 051	20103	10K00	5% 0,1W
3938	4822 051	20153	15K00	5% 0,1W
3939	4822 051	20181	180R00	5% 0,1W
3951	4822 051	20153	15K00	5% 0,1W
3958	4822 051	20102	1K00	5% 0,1W

**JUMPERS**

4101				
--	4822 051	20008	0R00	JUMP(0805)
4908				



**COILS**

5201	4822 152 20678	33UH
5202	4822 152 20677	10MUH
5203	4822 152 20677	10MUH
5205	4822 152 20678	33UH
5206	4822 152 20679	68UH
5207	4822 157 50975	1 MH
5210	4822 152 20683	28MUH ADJ.IND.
5211	4822 157 53575	3U3
5212	4822 157 70518	38MH
5227	4822 152 20679	68UH
5228	4822 152 20682	6.15UH
5231	4822 157 50975	1 MH
5232	4822 152 20677	10MUH
5251	4822 157 50975	1 MH
5252	4822 152 20678	33UH
5402	4822 157 50975	1 MH
5701	4822 157 53669	FILTER ASSY
5802	4822 242 81591	QUARZ 8.00MHZ
5905	4822 152 20677	10MUH
5906	4822 152 20677	10MUH
5909	4822 152 20677	10MUH
5910	4822 152 20677	10MUH

**DIODES**

6211	4822 130 81196	S5566B
6221	5322 130 80119	BBY40
6230	5322 130 34337	BAV99
6301	4822 130 30621	1N4148
6420	5322 130 34337	BAV99
6430	5322 130 34337	BAV99
6551	4822 130 30621	1N4148
6552	5322 130 31504	BZX79-C3V3
6601	4822 130 30621	1N4148
6602	4822 130 30621	1N4148
6704	4822 130 30621	1N4148
6705	4822 130 80751	1S1885 A
6706	4822 130 80751	1S1885 A
6712	5322 130 34331	BAV70
6713	4822 130 31983	BAT85
6714	4822 130 30621	1N4148
6715	4822 130 30621	1N4148
6716	4822 130 80954	BZV55-C5V6
6719	5322 130 34331	BAV70
6805	4822 130 82741	SLP144B-51
6871	4822 130 83074	BZV87
6901	4822 130 80954	BZV55-C5V6
6902	4822 130 80954	BZV55-C5V6
6903	4822 130 80954	BZV55-C5V6
6904	4822 130 30621	1N4148
6905	4822 130 80954	BZV55-C5V6
6907	4822 130 83493	BZV55-C10

**TRANSISTORS AND IC's**

7201	4822 209 72247	TEA6200/V2
7210	4822 130 42705	BC847
7211	4822 130 61233	BC857
7212	4822 130 42132	BC807
7222	4822 130 60686	BF513
7223	4822 130 42705	BC847
7230	4822 130 62495	2SK507F
7251	4822 209 30858	TSA6057/C1
7252	4822 130 42705	BC847
7301	4822 209 31129	TDA7313
7302	4822 209 83163	LM833N
7351	4822 209 31132	TDA7374V
7352	4822 209 31132	TDA7374V
7401	4822 209 83159	LA2000
7403	4822 209 31644	TDA7330
7419	4822 130 42705	BC847
7420	4822 209 32742	TL074IN
7501	4822 209 32775	BA3430S
7502	4822 130 42705	BC847
7535	4822 209 62772	HA12135A
7551	4822 130 42705	BC847
7601	4822 209 30859	TDA1591/V3
7602	4822 130 42705	BC847
7603	4822 130 42705	BC847
7604	4822 130 42705	BC847
7605	4822 130 42705	BC847
7606	4822 130 42705	BC847
7609	4822 130 42705	BC847
7701	4822 209 32687	TDA3602/N2
7703	4822 130 42705	BC847
7704	4822 130 42705	BC847
7705	4822 130 42705	BC847
7706	4822 130 61233	BC857
7711	4822 130 61233	BC857
7712	4822 130 42705	BC847
7714	4822 130 40995	BD438
7715	4822 130 61233	BC857
7716	4822 130 61233	BC857
7717	4822 130 42705	BC847
7718	4822 130 42705	BC847
7719	4822 130 42705	BC847
7721	4822 130 61233	BC857
7801	4822 209 32776	ST62T80
7803	4822 130 42705	BC847
7901	5322 209 11836	HEF4557
7902	4822 130 42705	BC847
7911	4822 209 32809	P83CE588EFB/002
7913	4822 130 42705	BC847
7914	4822 130 42705	BC847
7924	4822 130 42705	BC847
7925	4822 130 42705	BC847
7926	4822 130 42705	BC847
7927	4822 130 42705	BC847